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## ABSTRACT

This study of medical education was conducted as a part of the Tennessee Higher Education Commission's responsibility to design a master plan for higher education in Tennessee. It provides a background of information on Tennessee's needs for physicians and on the production of physicians by the three medical schools in the state. The study examines the need for additional medical education at both undergraduate and graduate levels and analyzes the question of whether Tennessee needs another medical school. It is not concerned with details of curriculum, except as these may have an effect on the supply of physicians. Instead, it concentrates on the broader public policy question of providing necessary training programs. The study assumes that whatever changes and expansion takes place, the curricula and programs will be operated at a high level of quality. (Author)

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**MEDICAL  
EDUCATION  
FOR  
TENNESSEE**



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1971

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# MEDICAL EDUCATION FOR TENNESSEE

A Report of the Tennessee Higher  
Education Commission

By

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February, 1971

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## INTRODUCTION

This study of medical education was conducted as a part of the Tennessee Higher Education Commission's responsibility to design a master plan for higher education in Tennessee. It provides a background of information on Tennessee's needs for physicians and on the production of physicians by the three medical schools in the state. The study examines the need for additional medical education at both undergraduate and graduate levels and analyzes the question of whether Tennessee needs another medical school. It is not concerned with details of curriculum, except as these may have an effect on the supply of physicians. Instead, it concentrates on the broader public policy question of providing necessary training programs. The study assumes that whatever changes and expansion takes place, the curricula and programs will be operated at a high level of quality.

The study was carried out by the staff of the Commission with the guidance of three consultants: Dr. Edmund D. Pellegrino, Vice President for Health Sciences at the State University of New York at Stony Brook; Dr. Vernon W. Lippard, Assistant to the President for Medical Development at Yale University; and Dr. Stanley W. Olson, President of the Southwest Foundation for Research and Education in San Antonio, Texas.

Many people who are concerned about medical education participated and advised the staff of the Commission throughout the study. Representatives of a number of agencies helped in conducting the study and gathering information. Among those agencies are the following: Tennessee Department of Public Health, Tennessee Medical Association, Tennessee Academy of General Practice, American Medical Association, Association of American Medical Colleges, Tennessee Hospital Association, Appalachian Regional Center for the Healing Arts, Meharry Medical College, University of Tennessee, Vanderbilt University, Tennessee Mid-South Regional Medical Program, and Memphis Regional Medical Program.

The study was begun in October, 1969. A preliminary outline was discussed with representatives of the medical schools, the Tennessee Department of Public Health, and the Tennessee Medical Association. Three medical educators were selected as consultants concerning the design of the study and its interpretation. They examined the preliminary data and came to the state for conferences in Memphis and Nash-

ville with representatives of the medical schools and others. The consultants made suggestions as to additional information needed. As the information was being gathered by the Tennessee Higher Education Commission's staff, there were numerous opportunities for discussing the status of medical education and Tennessee's needs for physicians with interested persons throughout the state. The three consultants returned after reviewing all accumulated information and advised the staff in interpretation and recommendations.

Recommendations and conclusions from the study were presented to the Tennessee Higher Education Commission and approved at their meeting on December 14, 1970. This report presents first a set of *Themes* which emerge from the study and which are discussed later in the report. Next the *Findings* section provides detailed answers to questions concerning physician manpower and education. Those detailed findings are interpreted in the *Conclusions* section and suggestions concerning medical education are discussed in depth. The *Recommendations* section contains a brief summary of all recommendations. Finally, the *Appendix* presents the detailed statistical information on which the report is based.

## THEMES

1. Tennessee is not as well supplied with physicians as is the nation as a whole, but is better supplied than most of the other Southeastern states.
2. The physician shortage in Tennessee is not due to lack of training for doctors, but to our inability to keep those who are trained here.
3. There is not a need for another medical school in Tennessee, neither as a means of increasing the supply of physicians nor to accommodate Tennessee students.
4. There is a need for better retention of doctors educated in Tennessee and for a better distribution of doctors within the state.
5. The state's first priority in medical education must be the support of a high quality program at the University of Tennessee College of Medicine.
6. Clinical training centers should be developed in East Tennessee to provide the final phase of medical training for some students from the University of Tennessee College of Medicine. These centers should also strengthen residency and internship training and continuing education in their service areas.
7. The state should contract with Vanderbilt University and Meharry Medical College to provide medical education for a limited number of additional Tennessee students.

## PHYSICIAN MANPOWER

### *What Is The Present Supply Of Physicians In Tennessee?*

A common indicator of the supply of physicians in an area is the number of physicians per 100,000 population.<sup>1</sup> In 1967 there were 145 active physicians per 100,000 population in the United States. In the same year, there were 113 per 100,000 in the Southeastern states and 119 per 100,000 in Tennessee.<sup>2</sup> (Figure 1 and Appendix Table 1) Not all of these physicians were in private practice. There were 135 in private practice per 100,000 population in the nation as a whole, 106 in the Southeastern states, and 110 in Tennessee. Among the Southeastern states only two had a better supply of physicians in private practice than did Tennessee; those were Florida and Virginia. While only 29 states had a better physician-population ratio, Tennessee ranked 46th in per capita income. Among the 16 states which were wealthier than Tennessee and yet had a poorer supply of physicians were three Southeastern states: Georgia, Kentucky, and North Carolina. (Appendix Table 2)

In Tennessee, as in the rest of the nation, most of the physicians are engaged in the practice of a specialty rather than a general or family practice. (Figure 2 and Appendix Table 3) In 1967, 22.3% of Tennessee physicians were engaged in general practice as compared with 22.5% in the nation as a whole. Only in the surgical specialties was there much difference between Tennessee and the rest of the nation; 31.6% of Tennessee's physicians were engaged in a surgical specialty as compared with only 26.8% of those in the nation as a whole.

### *How Are Physicians In Tennessee Distributed Across The State?*

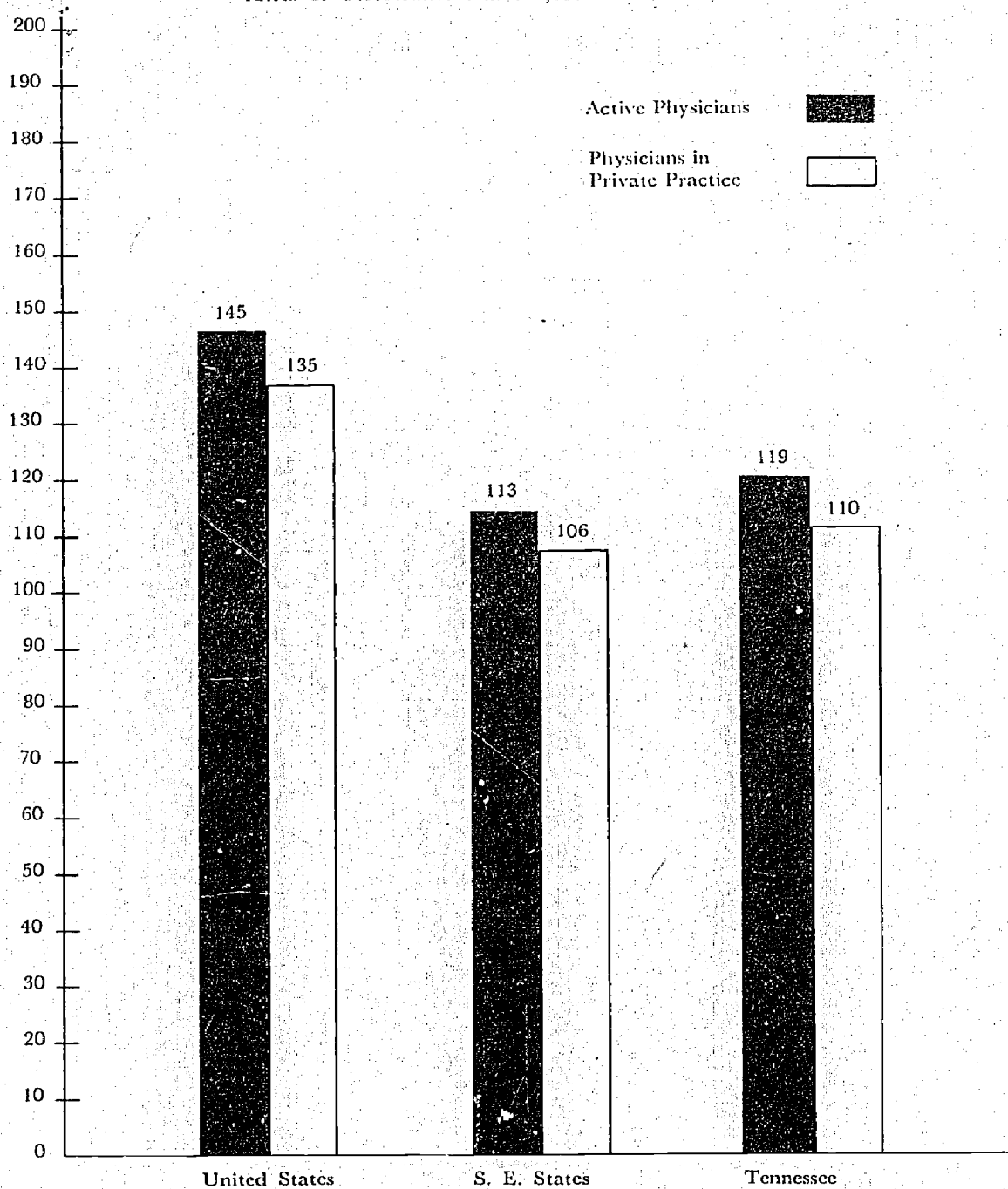
Although the state of Tennessee as a whole is supplied relatively well with physicians in comparison with other Southeastern states, there are some parts of Tennessee which are much better off than others. (Appendix Tables 4 and 5) In 1970 there were seven counties in which no

<sup>1</sup>The count of physicians in an area is often confusing. There are several sources of these counts and these usually do not agree. These are: (1) the Physicians Record Computer tape of the American Medical Association, listing all physicians known to reside in Tennessee regardless of association membership or licensure status, (2) Membership of the Tennessee Medical Association and the Volunteer State Medical Association, and (3) the registry of those licensed to practice medicine by the Tennessee Healing Arts Board, which does not include some inactive physicians and some who work for an agency where licensure is not required. It has been necessary in this report to use more than one source for the number in Tennessee in order to allow comparison with other states for which only a particular count was available. The sources used at different points in the report are documented.

<sup>2</sup>The year 1967 is the most recent for which comparable counts are available.

FIGURE 1

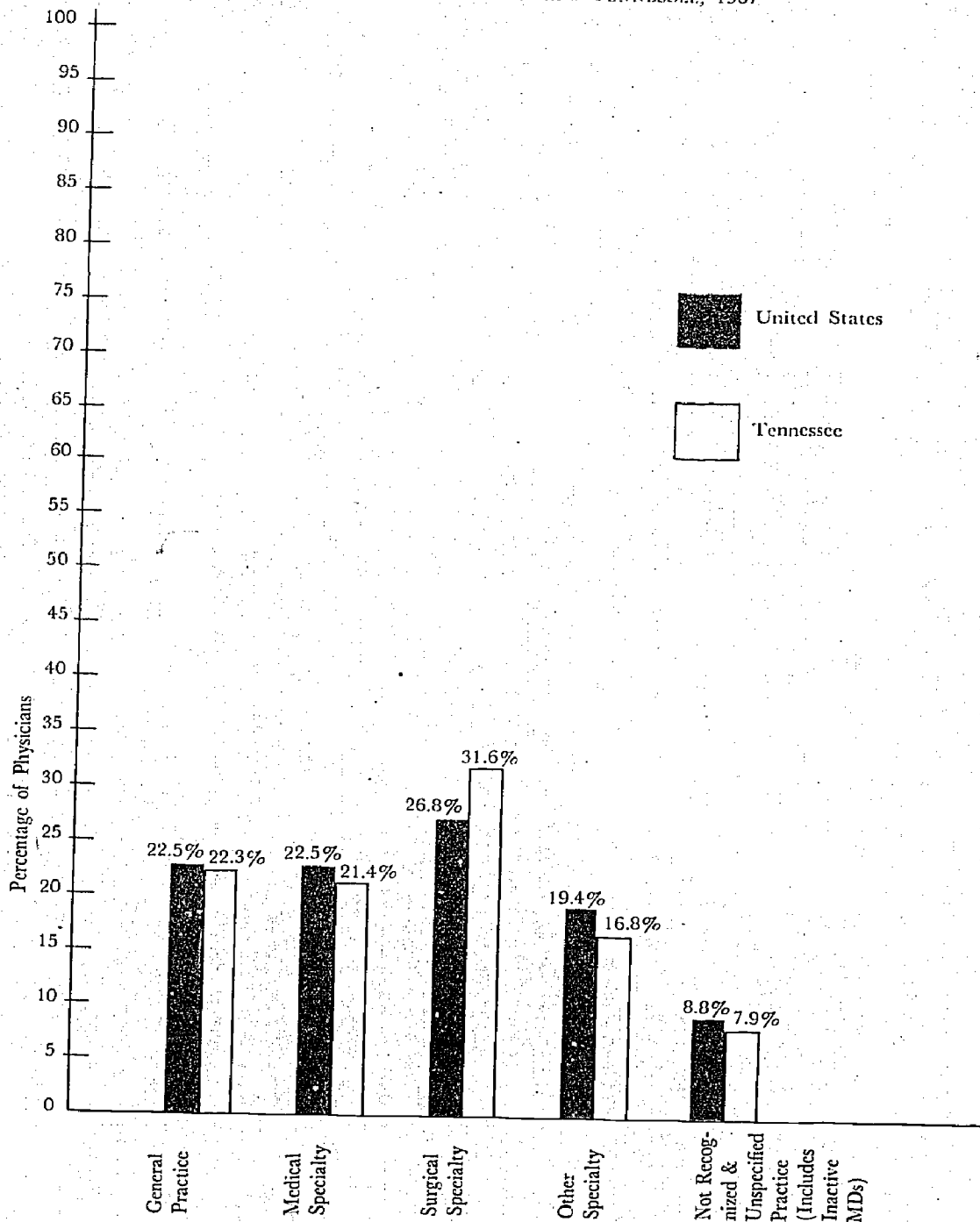
RATIO OF PHYSICIANS PER 100,000 POPULATION, 1967



Source: C. N. Theodore and J. N. Haug, *Selected Characteristics of the Physician Population, 1963 and 1967*. Chicago: American Medical Association, 1968.

FIGURE 2

PERCENTAGE DISTRIBUTIONS OF PHYSICIANS BY TYPE OF PRACTICE IN THE U.S. AND TENNESSEE, 1967



Source: C. N. Theodore and J. N. Haug, *Selected Characteristics of the Physician Population, 1963 and 1967*. Chicago: American Medical Association, 1968.



more than one physician practices and thirteen in which no more than two practice. This pattern has not changed significantly in the past decade. In 1970 there were eight Tennessee counties in which there were more than 5,000 persons for each physician, while there were nine counties with fewer than 1,000 persons per physician. (Figures . . . . .)

Most of Tennessee's physicians are in the metropolitan areas. Davidson County has the most favorable ratio with 185 physicians per 100,000 population; Shelby County has 166 per 100,000; Knox County, 149; and Hamilton County, 142. There is also a difference in the physician-population ratio in the various divisions of the state with 126 physicians per 100,000 population in West Tennessee; 101 in Middle Tennessee; 100 in East Tennessee; and 93 in Upper East Tennessee. (Appendix Table 6) The area in which there was the greatest improvement in this ratio in the past decade is West Tennessee, with a 14% increase, while Middle Tennessee has increased 11%; East Tennessee, 9%; and Upper East Tennessee, 9%. (Appendix Table 7) There is a direct relationship between a county's supply of physicians and availability of hospital facilities, population, and to a lesser extent per capita income. (Appendix Table 8) It is the citizens of the less populated, less wealthy counties which have poorest access to physicians and hospitals.

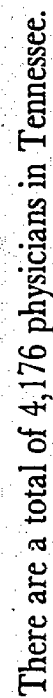
#### *In What Type of Practice Are Tennessee Physicians Engaged?*

Relatively few Tennessee physicians are engaged in general practice and most of these are in parts of the state where physicians are in short supply. Figures 5 and 6 depict the very uneven distribution of general practitioners in various geographic areas of the state. As would be expected the percentage of physicians who are engaged in general practice is lowest in the metropolitan counties and highest in the rural counties. Only 9% of the Davidson County physicians are general practitioners, while 77% of the physicians in rural counties of Upper East Tennessee (except Sullivan and Washington Counties) are in general practice. (Appendix Table 6) Specialists are heavily concentrated in the counties which contain medical schools: 802 specialists in Shelby County, and 644 in Davidson County. However, the three metropolitan counties which do not have medical schools are well supplied with specialists also: 287 in Knox County, 265 in Hamilton County, and 202 in the Sullivan-Washington County area. Outside of these metropolitan counties, only 19 others in the state have as many as five specialists in practice.

Fewer than half of the physicians in Tennessee have practices which

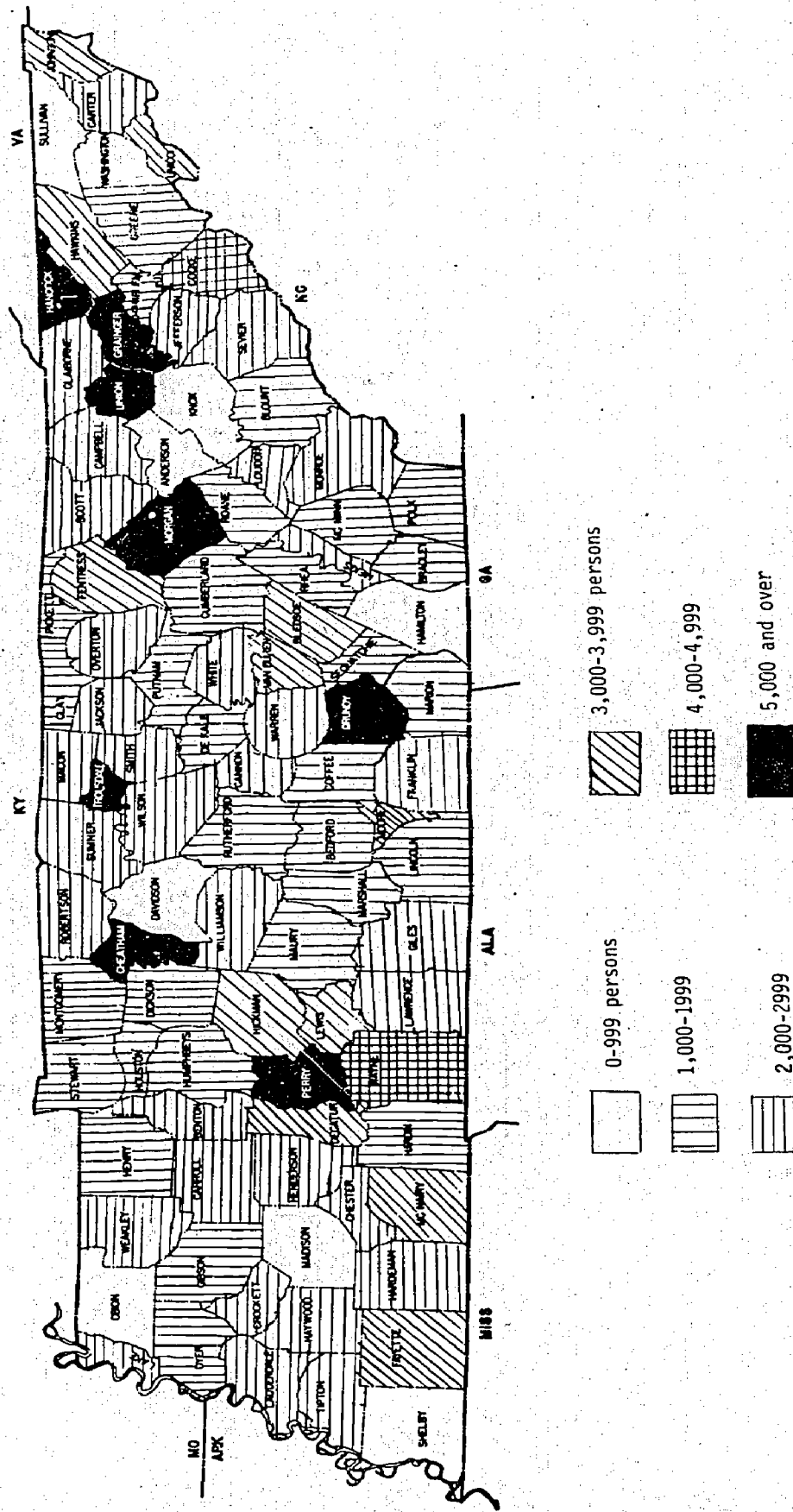


NUMBER OF PHYSICIANS REGISTERED IN TENNESSEE COUNTIES, 1970



Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

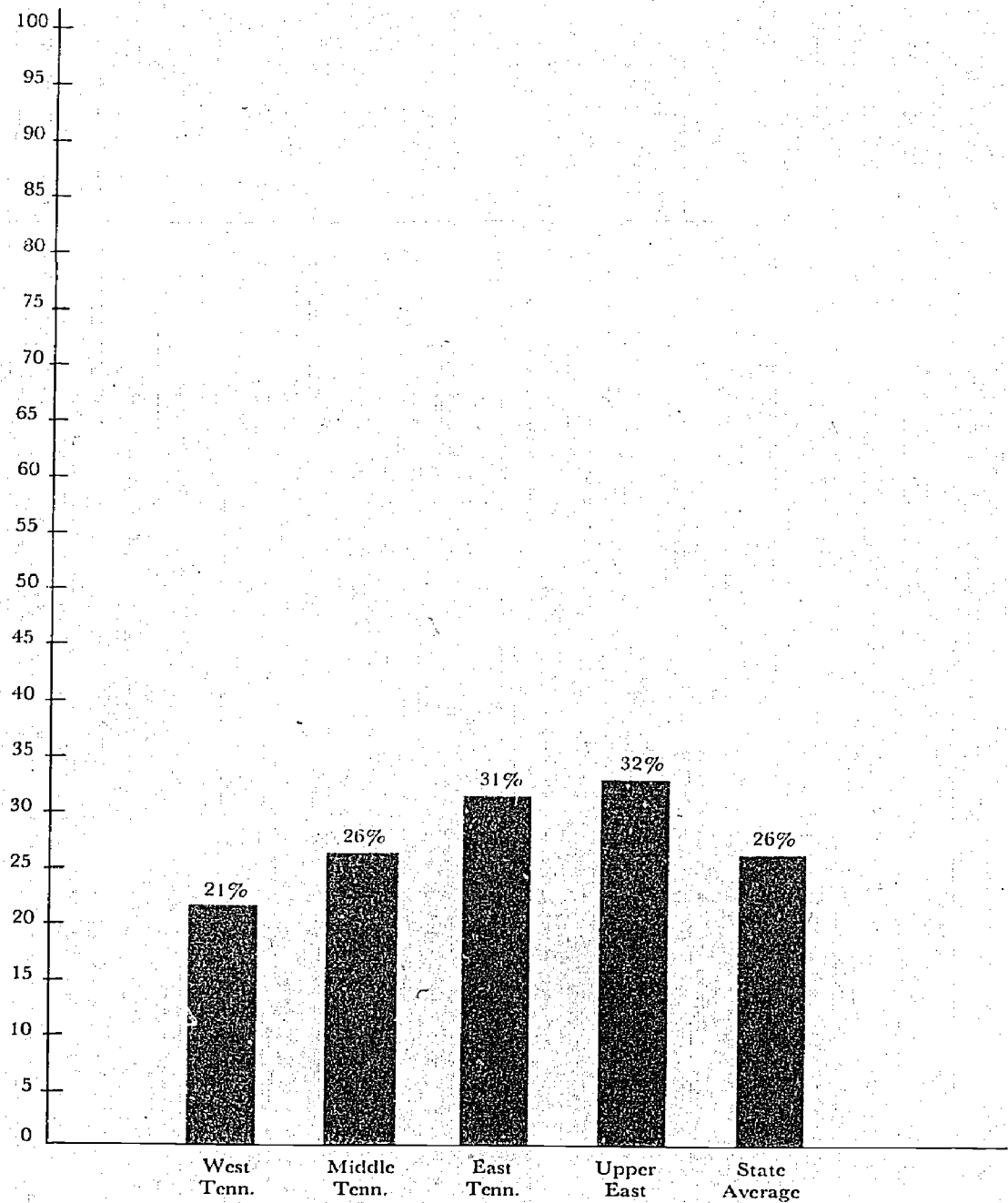
FIGURE 4  
POPULATION PER PHYSICIAN IN TENNESSEE COUNTIES, 1970



Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

FIGURE 5

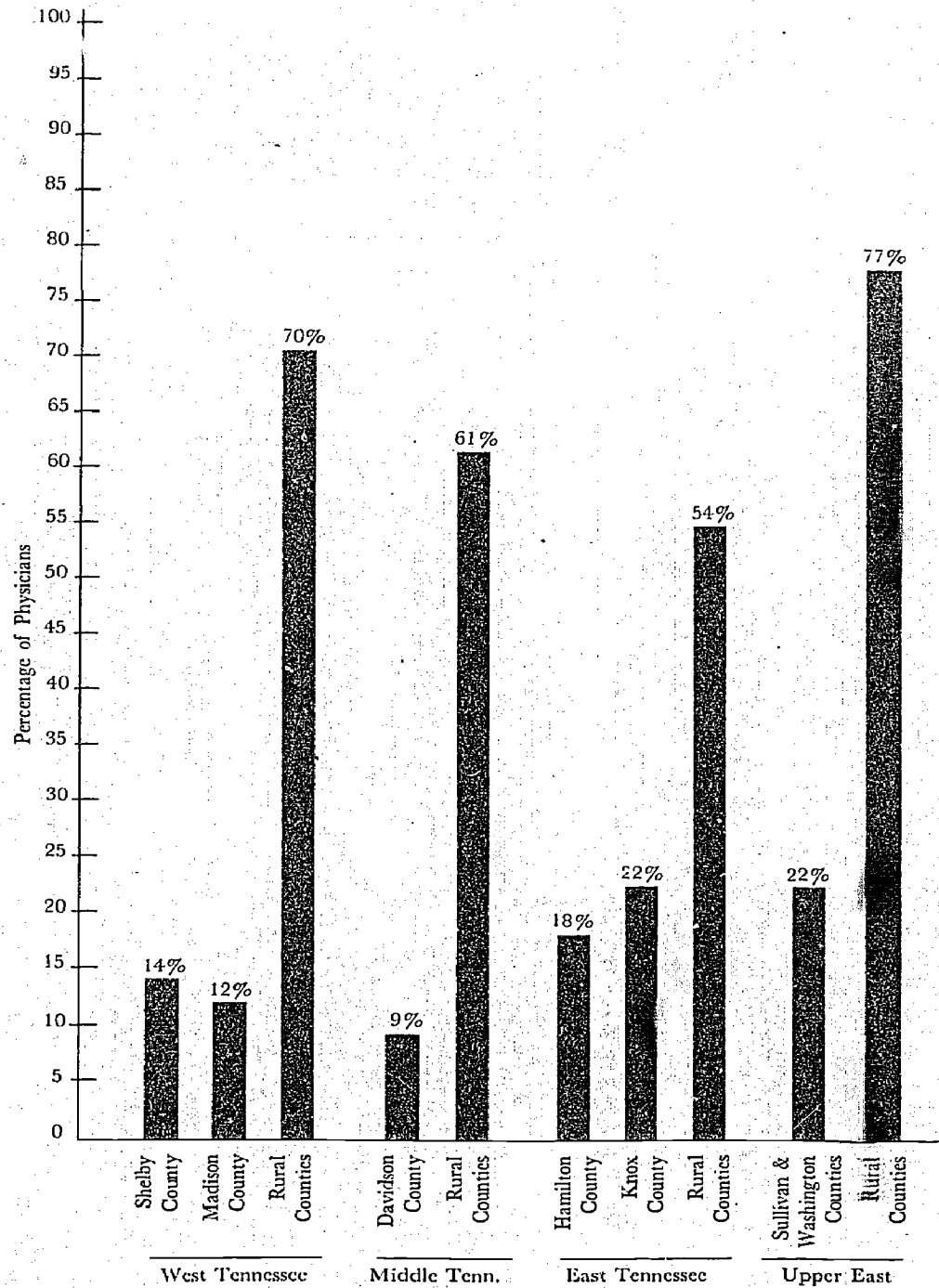
PERCENTAGE OF PHYSICIANS WHO ARE GENERAL PRACTITIONERS  
IN TENNESSEE BY GEOGRAPHICAL REGION, 1970



Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

FIGURE 6

PERCENTAGE OF THE PHYSICIANS WHO ARE GENERAL PRACTITIONERS  
IN URBAN AND RURAL COUNTIES OF TENNESSEE, 1970



Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

could be referred to a "primary patient care", serving as the regular physician for an individual or a family. More of them provide specialized services, generally on referral from another physician. Identifying primary physicians as those in general practice, internal medicine, pediatrics, and obstetrics-gynecology. Table A shows the ratio of these to population in various parts of the state.

TABLE A  
PHYSICIANS ENGAGED IN PRIMARY PATIENT CARE  
IN TENNESSEE, 1970

| <i>Location</i>             | <i>No. of MDs In<br/>Primary Patient<br/>Care*</i> | <i>Ratio of MDs<br/>Per 100,000<br/>Population</i> |
|-----------------------------|--|--|
| <i>West Tennessee</i>       |  |  |
| Shelby County               | 411  | 57   |
| Madison County              | 34   | 53   |
| Other Counties              | 165  | 41   |
| Total                       | 608  | 52   |
| <i>Middle Tennessee</i>     |  |  |
| Davidson County             | 276  | 62   |
| Other Counties              | 29   | 39   |
| Total                       | 57   | 47   |
| <i>East Tennessee</i>       |  |  |
| Hamilton County             | 151  | 58   |
| Knox County                 | 162  | 60   |
| Other Counties              | 238  | 41   |
| Total                       | 541  | 49   |
| <i>Upper East Tennessee</i> |  |  |
| Sullivan County             | 91   | 73   |
| Washington County           | 40   | 55   |
| Other Counties              | 52   | 34   |
| Total                       | 183  | 52   |
| STATE TOTAL                 | 1,906  | 50   |

\* This is the number of MDs engaged in general practice, internal medicine, pediatrics, and obstetrics-gynecology.

Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

The supply of primary physicians differs little from one geographic region to another, but persons in urban areas have better access to a physician than do rural residents.

Of 4,906 physicians reported by the AMA as residing in Tennessee in 1970, 1,715 are certified in their area of specialization—35% of the total. While it might be expected that those counties containing medical schools would have the largest percentages of their physicians holding

board certification, this is not the case. In Washington County, with no medical school, 55% of the physicians hold board certification in their specialties. In neighboring Sullivan County, 48% are board certified, and in Madison County 54%, with 43% in both Knox County and Hamilton County. In the two counties which have medical schools, Shelby and Davidson, 37% of the physicians are board certified. (Figures 7 and 8 and Appendix Table 9)

#### *What Increases In Tennessee's Supply Of Physicians Will Be Required?*

In 1961 there were 3,519 physicians registered in the state of Tennessee. By 1970, this number had increased to 4,176.<sup>3</sup> While this represented an increase of nearly 19%, it allowed only a 10% improvement in the physician-population ratio due to population growth in the state. (Appendix Table 5) While the 19% increase in the number of physicians in the past nine years would suggest that the outlook for further increase in the future is good, it is noted that these Tennessee increases do not compare favorably with those in other parts of the country. Between 1963 and 1967, the active physician-population ratio in the United States improved by 7.4% and in the Southeast by 9.7%. During the same period, the ratio improved by only 5.3% in Tennessee. (Appendix Table 1)

Apparently the recent growth in the number of physicians in Tennessee is not due to the addition of new licensees. When the number of medical licenses issued in the United States in 1968 is compared with the number issued in 1961, a gain of nearly 22% is seen. However, during the same period, Southeastern states experienced a slight decrease, and Tennessee's decrease (34%) was the greatest in the region. (Appendix Table 10) While fewer physicians are choosing to obtain a Tennessee license in recent years, the increase in numbers suggests that more of those who do obtain the Tennessee license are actually practicing in the state.

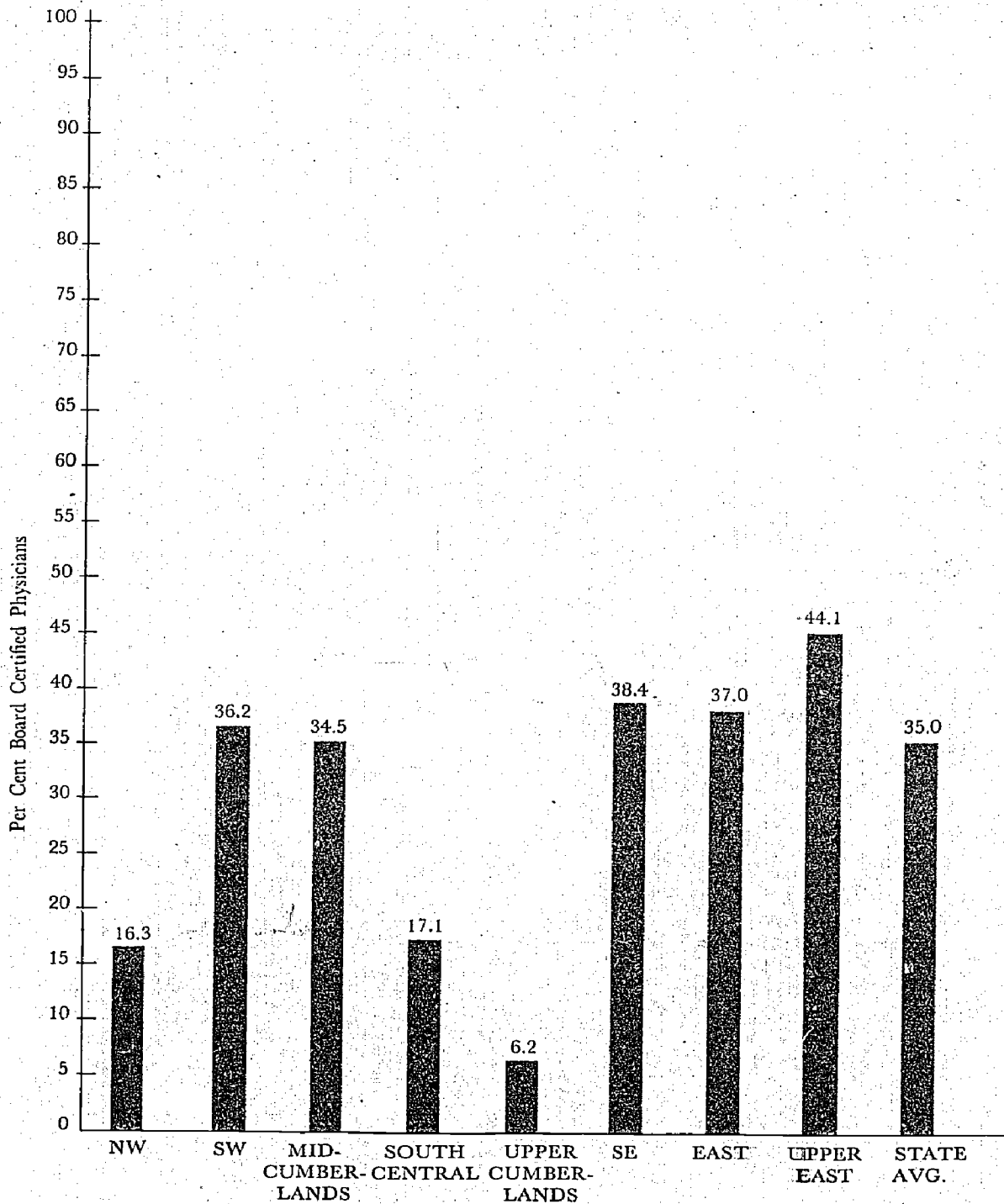
The age of physicians is a factor to be considered in planning for future supply. The median age interval of Tennessee physicians is 40-44 years; the same median age is true of physicians nation-wide and in the Southeast. Only 23% of Tennessee physicians are 55 or older, while 27% of U.S. physicians are that old. (Appendix Table 11) Replacements for those who will die or retire must be considered when planning an increase in the state's supply of physicians. Approximately 2.3% of Tennessee physicians die each year. (Appendix Table 12) If Tennessee were

<sup>3</sup>The count of physicians used here differs from the count shown above. It represents those who hold Tennessee licenses.



FIGURE 7

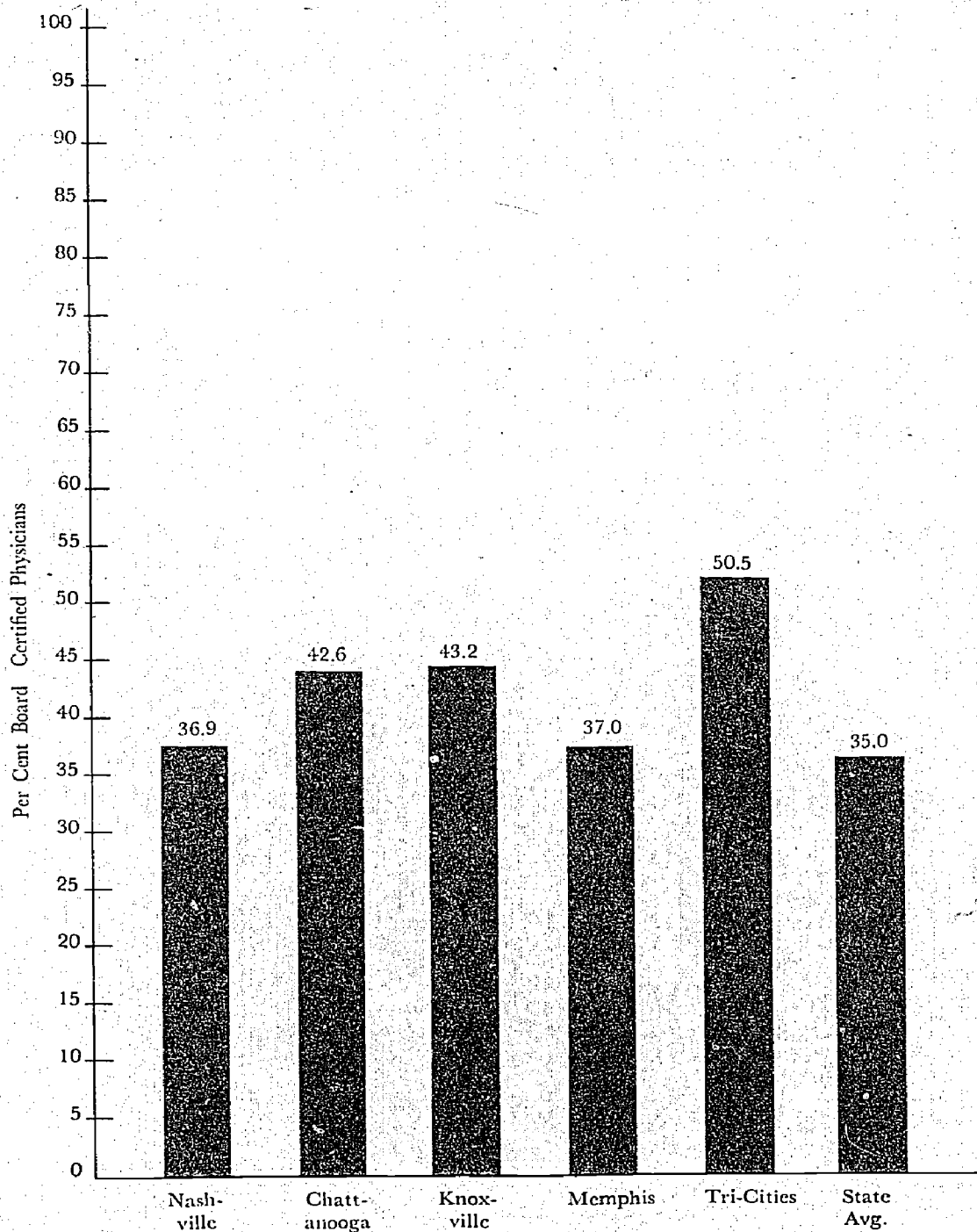
PERCENTAGE OF PHYSICIANS WHO ARE BOARD CERTIFIED  
IN TENNESSEE BY GEOGRAPHICAL REGION



Source: American Medical Association Physicians Record Tape, 1970

FIGURE 8

PERCENTAGE OF PHYSICIANS WHO ARE BOARD CERTIFIED  
IN TENNESSEE'S METROPOLITAN AREAS



Source: American Medical Association Physicians Record Tape, 1970



to achieve by 1980 the 1967 nation-wide physician-population ratio, it would be necessary to have 2,000 more than were in the state in 1967. Furthermore, some 1,400 will die and must be replaced during the 1970's, requiring the actual addition of 3,400 physicians to reach the supply which was average for the nation in 1967. Figure nine shows the number of physicians we might expect to have in Tennessee during the next ten years, assuming that the present rate of increase continues. It is seen that we would still be short of the 1980 goal.

#### *What Factors Influence Physicians To Practice In Tennessee?*

In a comprehensive study ten years ago, Weiskotten<sup>4</sup> analyzed the characteristics of medical college graduates between 1915 and 1950 in terms of their distribution throughout the country. He pointed up several factors as being influential in a physician's decision in regard to his place of practice. Those factors, not necessarily in order of importance, were:

1. Demand for medical services
2. Location of the medical college attended
3. Place of residence before entering medical college
4. Place where internship and/or residency was served
5. Methods and quality of transportation and communication
6. Ready accessibility of hospital and consultation facilities
7. Climate
8. Availability of good schools
9. Other personal, social, and economic factors

Weiskotten gave particular emphasis to four geographic factors which influence the decision. By studying the physicians who had graduated from all U.S. medical schools in 1950, he revealed the relative importance of the four factors listed below.

Practicing in state of residency training—63.06%

Practicing in home state—59.29%

Practicing in state of internship—48.83%

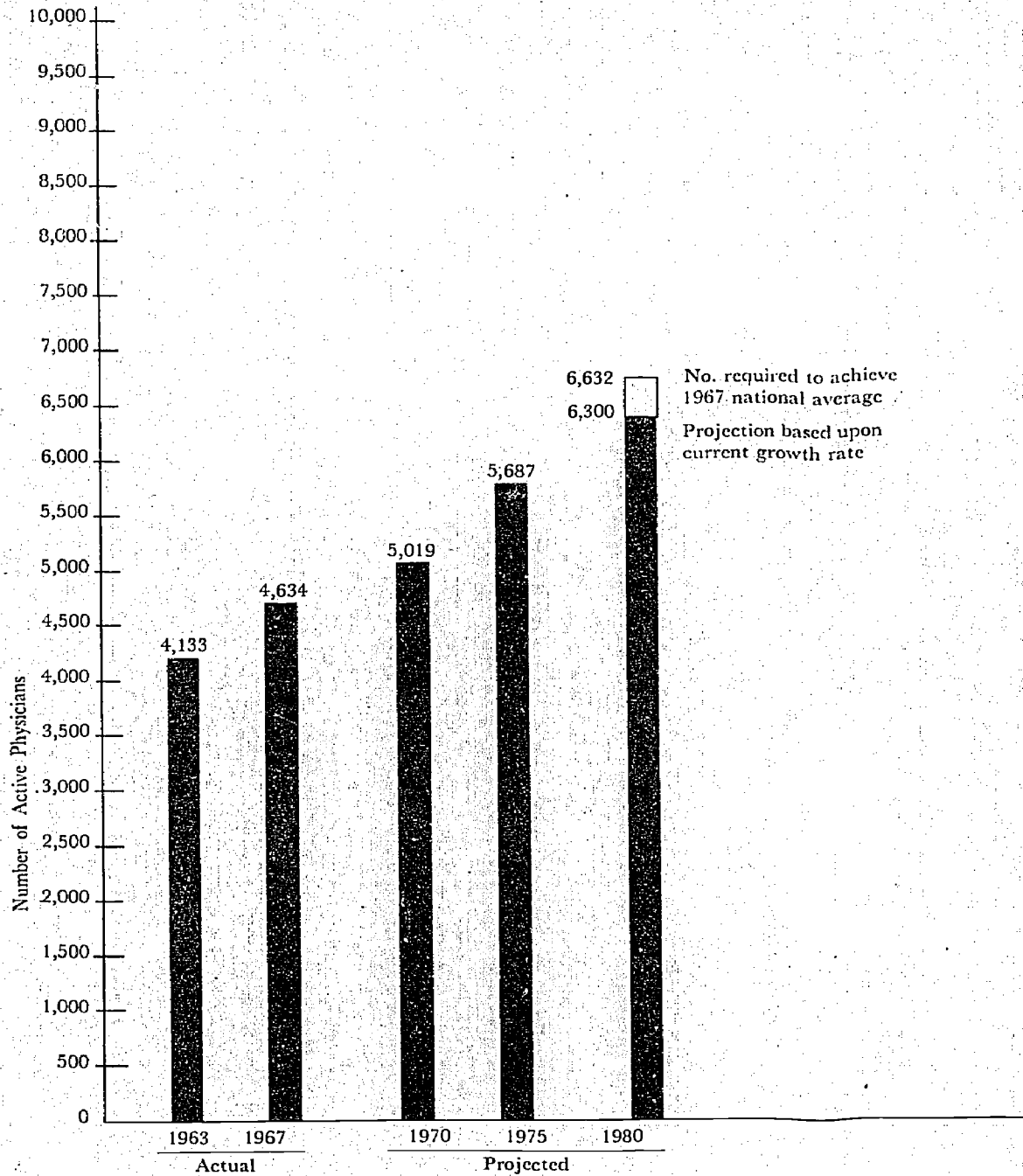
Practicing in state of medical college—43.43%

These findings were interpreted to indicate that the state in which one does his residency training has more influence on location of practice than does any of the other three geographic factors.

<sup>4</sup>H. G. Weiskotten, et al, "Trends in Medical Practice: An Analysis of the Distribution and Characteristics of Medical College Graduates, 1915-1950," *Journal of Medical Education* Vol. 35, No. 12, December, 1960, p. 1071-1121.

FIGURE 9

ACTUAL AND PROJECTED NUMBER OF ACTIVE PHYSICIANS  
IN TENNESSEE TO 1980



Source for Actual Number of Active Physicians:  
C. N. Theodore and J. N. Haug, *Selected Characteristics of the  
Physician Population, 1963 and 1967*. Chicago: American Medical  
Association, 1968.

In an attempt to ascertain if these factors have the same importance among Tennessee physicians, records were obtained from the American Medical Association containing information on all physicians practicing in the state of Tennessee in 1970. Four items of information were analyzed: (1) state of birth (state of residence prior to entering medical school was not available), (2) state of medical school attended, (3) state where internship training was taken, and (4) state where residency training, if any, was taken. Appendix tables 13 through 16 show the detailed findings of that analysis. A summary of the findings is as follows:

Attended a Tennessee Medical School—59.5%

Residency Training in Tennessee—54.4%

Internship Training in Tennessee—46.2%

Born in Tennessee—44.4%

In contrast to Weiskotten's earlier study involving all the states, it would appear that graduation from a medical school in Tennessee is more highly related to a decision to practice in the state than is the location of internship or residency. This is to be expected since Tennessee is more active in educating medical students than most other states, but is not as active in the training of interns and residents.

## UNDERGRADUATE MEDICAL EDUCATION

### *How Many Students Do Tennessee's Medical Schools Enroll?*

Tennessee's three medical colleges admit approximately 365 students each year: 200 at the University of Tennessee, 75 at Vanderbilt University, and 90 at Meharry Medical College. The University of Tennessee has operated a medical school in Memphis since 1911 and now enrolls and graduates nearly 200 physicians a year. It is one of the largest medical schools in the United States and is not able to accommodate more students with the existing teaching facilities. The Vanderbilt Medical School has been in existence since 1875, and graduates approximately 50 students a year. The number of entering students was increased to 60 in 1969 and to 75 in 1970. Meharry Medical College has been admitting about 70 students, but its entering class was increased to 90 in 1970. It was instituted in 1876, and for many years Meharry and Howard University produced practically all of the Negro physicians in the United States.

### *How Does Tennessee Compare With Other States In Terms of Undergraduate Medical Education?*

In many ways Tennessee seems to be doing more than its share in the production of M.D.'s. This is true not only in absolute terms, but also relative to the state's wealth, its population, and its production of college graduates in general. More students are enrolled in Tennessee's medical schools than in those of any other Southeastern state: 1,243 students during the 1968-69 school year (738 at U.T., 227 at Vanderbilt, and 278 at Meharry). Louisiana with 1,016 students enrolled was the only other Southeastern state to enroll more than 1,000 students. (Appendix Table 17) Only nine states in the nation that year enrolled more medical students than did the Tennessee schools. (Appendix Table 18) It is noteworthy that Tennessee's medical enrollment is so high, while its per capita income ranks only seventh among the Southeastern states and 46th among all states. (Appendix Table 19)

When one looks at the number of medical degrees awarded each year, the state of Tennessee holds the same relationship to other states that it does in terms of enrollment. (Appendix Table 20) The University of Tennessee alone graduates more physicians than do all schools, public and private combined, in any Southeastern state with the exception of Louisiana and Virginia. In 1969 there were 262 medical graduates from Tennessee schools: 162 from U.T., 47 from Vanderbilt, and 53 from

Meharry. Only nine states in the nation graduated more physicians that year than were graduated from the schools in Tennessee. (Appendix Table 21) This is a significant achievement when considered in terms of Tennessee's per capita income rank of 46th and its population rank of 17th. Only two states (Vermont and Nebraska) and the District of Columbia produce more physicians per million population than does Tennessee. (Appendix Table 22) Among the Southeastern states, only in Virginia, where both medical schools are state supported, do the tax-supported schools produce more physicians than are produced at the University of Tennessee. In fact, only eight states in the nation produce more physicians through their state-supported medical schools than does Tennessee.

Tennessee also compares well with other states in terms of the number of its young people who study medicine. Among Southeastern states, only Arkansas has a larger percentage of its population enrolled in medical school; furthermore, Arkansas is the only state in the nation with a lower income level than Tennessee, which has as large a percentage of its population in medical education. (Appendix Tables 19 and 23) In 1966-67 only 11 states had more residents entering medical school in relation to the number of bachelor's degrees awarded than did Tennessee.

#### *From What States Do Tennessee's Medical Students Come?*

All three medical schools require an applicant to submit a record indicating at least three years of course work in an accredited college. The University of Tennessee gives preference to Tennessee applicants and to those who hold a baccalaureate degree. Although Vanderbilt and Meharry do not give Tennesseans preference, Meharry does give preference to those who hold a baccalaureate degree and to Negroes. Most of the applications to Tennessee medical schools are from out-of-state students. This is less true of University of Tennessee applications than of those to the two private schools. Ordinarily some 65-70% of University of Tennessee applications come from persons outside the state, with about 94% of Vanderbilt applications and 97% of Meharry applications from out-of-state students.

Slightly less than half of the students admitted to Tennessee schools are from other states (48% in 1968), and this proportion has been fairly stable during recent years. (Appendix Table 24)

TABLE B  
FIRST-YEAR MEDICAL STUDENTS ENROLLED IN TENNESSEE MEDICAL SCHOOLS

|         | <i>UT</i>               |                                | <i>Vanderbilt</i>       |                                | <i>Meharry</i>          |                                | <i>Total</i>            |                                |
|---------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|
|         | <i>No.<br/>Enrolled</i> | <i>%<br/>Out-of-<br/>State</i> | <i>No.<br/>Enrolled</i> | <i>%<br/>Out-of-<br/>State</i> | <i>No.<br/>Enrolled</i> | <i>%<br/>Out-of-<br/>State</i> | <i>No.<br/>Enrolled</i> | <i>%<br/>Out-of-<br/>State</i> |
| 1964-65 | 181                     | 23.75%                         | 54                      | 66.66%                         | 62                      | 91.93%                         | 297                     | 45.79%                         |
| 1965-66 | 176                     | 31.81                          | 53                      | 64.15                          | 53                      | 94.33                          | 282                     | 49.64                          |
| 1966-67 | 186                     | 28.49                          | 53                      | 64.15                          | 72                      | 95.83                          | 311                     | 50.16                          |
| 1967-68 | 198                     | 26.26                          | 58                      | 86.20                          | 71                      | 94.36                          | 327                     | 51.68                          |
| 1968-69 | 192                     | 20.83                          | 59                      | 77.96                          | 72                      | 94.44                          | 323                     | 47.67                          |
| 1969-70 | 192                     | 15.00                          | 60                      | 68.34                          | 88                      | 92.31                          | 340                     | 58.55                          |
| 1970-71 | 194                     | 10.00                          | 75                      | 78.67                          | 90                      | 88.89                          | 359                     | 59.19                          |

Source: Association of American Medical Colleges  
Computer Tape for 1964 through 1968.  
Direct institutional communication for 1969 and 1970.

Most of the out-of-state students attend Vanderbilt and Meharry; U.T.'s out-of-state admissions have been declining in very recent years from 24% in 1964 to 15% in 1969 and were expected to be at about 10% in 1970. In recent years Vanderbilt has been admitting about 70-75% of its students from outside Tennessee, and Meharry more than 90%. Meharry is beginning to draw more students from outside the Southeastern region and fewer foreign students and it is making effort to increase the number of Tennesseans admitted. In most of the state-supported medical schools in the Southeast, a smaller proportion of students are from out-of-state than is the case at the University of Tennessee. The same is true of the private schools in the Southeast; most of these admit a smaller proportion from out-of-state than do Vanderbilt and Meharry. (Figure 10 and Appendix Table 25)

The University of Tennessee's practice to give admission preference to Tennessee applicants is seen in an analysis of Medical College Admissions Test (MCAT) scores from the years 1964 through 1968.

TABLE C  
AVERAGE MCAT SCORES FOR ENROLLED STUDENTS IN  
TENNESSEE MEDICAL SCHOOLS,  
1964-1968

|              | <i>UT</i> | <i>Vanderbilt</i> | <i>Meharry</i> |
|--------------|-----------|-------------------|----------------|
| 1964-65      |           |                   |                |
| Tennesseans  | 518       | 587               | 439            |
| Out-of-State | 529       | 552               | 456            |
| 1965-66      |           |                   |                |
| Tennesseans  | 516       | 569               | 407            |
| Out-of-State | 521       | 562               | 468            |



TABLE C  
AVERAGE MCAT SCORES FOR ENROLLED STUDENTS IN  
TENNESSEE MEDICAL SCHOOLS,  
1964-1968 (continued)

|              | UT  | Vanderbilt | Meharry |
|--------------|-----|------------|---------|
| 1966-67      |     |            |         |
| Tennesseans  | 524 | 586        | 393     |
| Out-of-State | 532 | 583        | 469     |
| 1967-68      |     |            |         |
| Tennesseans  | 520 | 579        | 432     |
| Out-of-State | 529 | 578        | 460     |
| 1968-69      |     |            |         |
| Tennesseans  | 525 | 579        | 453     |
| Out-of-State | 558 | 596        | 466     |

Source: Association of American Medical Colleges, Computer Tape.

Each year the average score of out-of-state admissions was higher than that of Tennessee admissions. This is also true at Meharry, where the scores for out-of-state students have been higher than those of students admitted from Tennessee. However, this is not a true indicator of preference, as the Meharry admission's staff have found that they are not able to depend very heavily on MCAT scores as predictors of success in their population of applicants. At Vanderbilt there is very little difference in the MCAT scores of out-of-state admissions and Tennessee admissions.

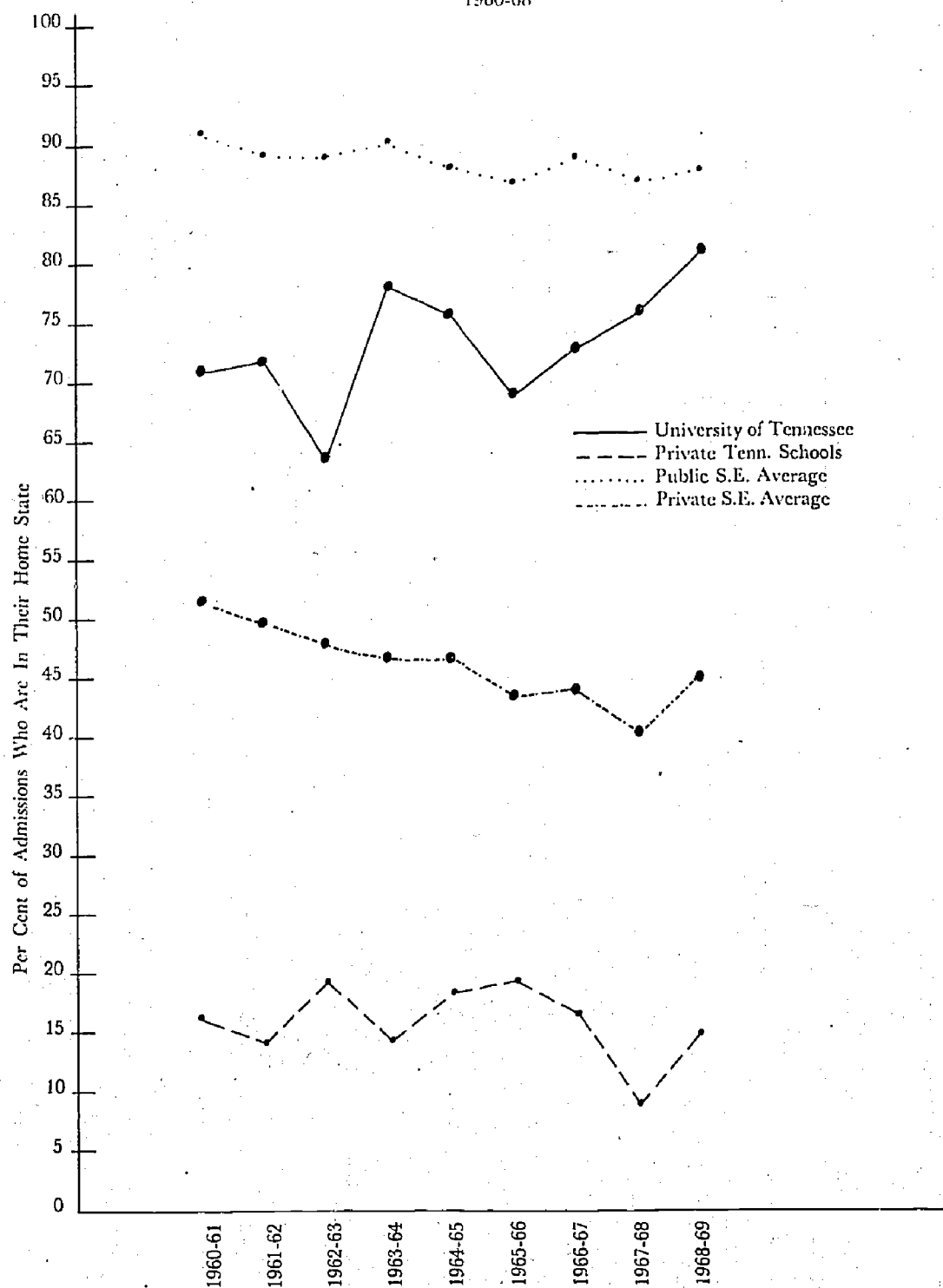
*Where Do Tennesseans Go To Medical School And  
How Difficult Is It For Them To Gain Admission?*

The majority of Tennessee students who go to medical school attend one of those in the state. In 1968, 218 Tennesseans entered medical school; 78% of these went to the University of Tennessee, 10% to Vanderbilt or Meharry, and 12% went out-of-state. (Appendix Table 26) Tennessee students find it somewhat easier to gain admission to medical school than do residents of most other states. Throughout the 1960's, with the exception of one year (1962-63), a higher percentage of Tennessee applicants were accepted than were applicants from the nation as a whole or the Southeastern states as a group. (Appendix Table 27) Tennessee students who desire to enter medical school also find it necessary to make fewer applications than did students in the nation as a whole or the Southeastern states as a group. This was the case in each year of the 1960's. (Appendix Table 28)

Despite the fact that Tennesseans find admission to a medical school easy, relative to students from other states, they are having more difficulty being admitted than they had ten years ago. During the 1960's, there was an increase in the number of applications submitted by each

FIGURE 10

IN-STATE ADMISSIONS TO PUBLIC AND PRIVATE MEDICAL SCHOOLS,  
1960-68



Source: *Journal of the American Medical Association*, Vol. 178, No. 6, November 11, 1961; Vol. 182, No. 7, November 17, 1962; Vol. 186, No. 7, November 16, 1963; Vol. 190, No. 7, November 16, 1964; Vol. 194, No. 7, November 15, 1965; Vol. 198, No. 8, November 21, 1966; Vol. 202, No. 8, November 20, 1967; Vol. 206, No. 9, November 25, 1968; Vol. 210, No. 8, November 24, 1969.



student desiring to enroll. Furthermore, during the same period there was a decrease in the percentage of applicants who were accepted, although the absolute number of medical students increased considerably. (Appendix Table 27)

*Are There Qualified Tennessee Students Who Are Unable To Gain Admission To A Medical School?*

In the year 1968-69, 324 Tennessee residents applied for admission to medical school in Tennessee and some of these applied to out-of-state schools as well. Most of these (212) applied only to the University of Tennessee; 69 students applied to both the University of Tennessee and Vanderbilt, but few others applied to more than one medical school in the state. One hundred eighty-five of the applicants were admitted to a Tennessee school, either in the year they applied or the next, and 22 were admitted to out-of-state schools. Only 117 of the 324 applicants failed to gain admission at all. (Appendix Tables 29, 30, and 31)

Not all applicants are qualified for medical study. One criterion used for determining qualification is the score from the Medical College Admissions Test. While these test scores constitute only one of several factors used in the admission's decision, they do provide a constant basis for making some judgment about Tennessee applicants. If an average score of 500 on that test is chosen as the criterion, only 30 of the 117 unsuccessful applicants are found to be qualified. (Appendix Table 32) Assuming that 1968-69 was a representative year, it appears that relatively few qualified Tennesseans seek admission to medical school without success.

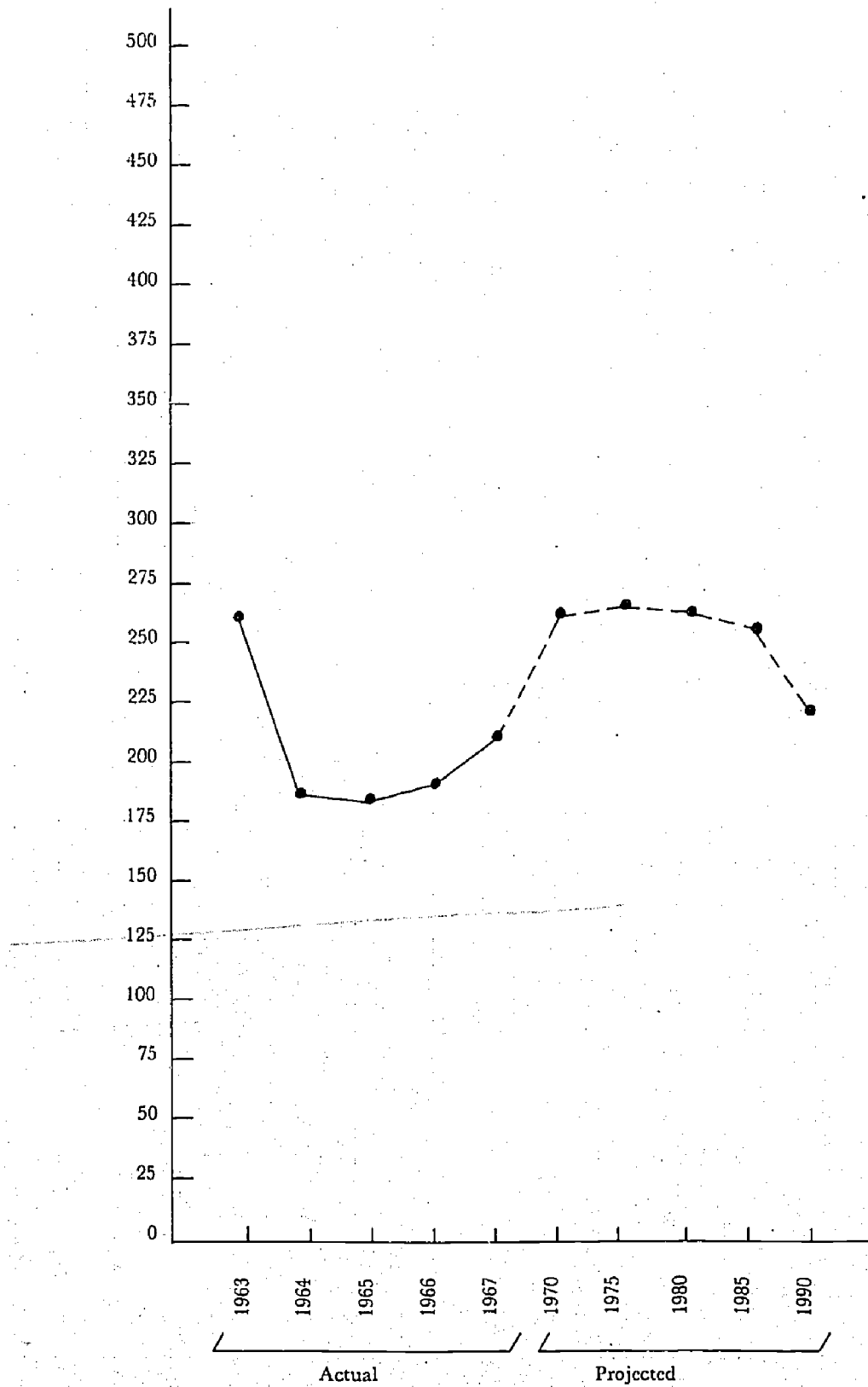
*How Much Is The Demand For Medical Education For Tennessee Students Likely To Increase?*

It is likely that the number of Tennesseans who want a medical education will increase in the next several decades. One basis for estimating the magnitude of this increase for any given year is the number of live births 22 years earlier; this figure has for some time been a stable predictor of the number of students who would be enrolled in medical school. This method has been used to predict the spaces which will be occupied by Tennesseans in all medical schools to the year 1990. (Figure 11 and Appendix Table 33)

Another basis for predicting demand is the number of bachelor's degrees awarded relative to the number of Tennessee students admitted to Tennessee medical schools. (Figure 12 and Appendix Table 34)

FIGURE 11

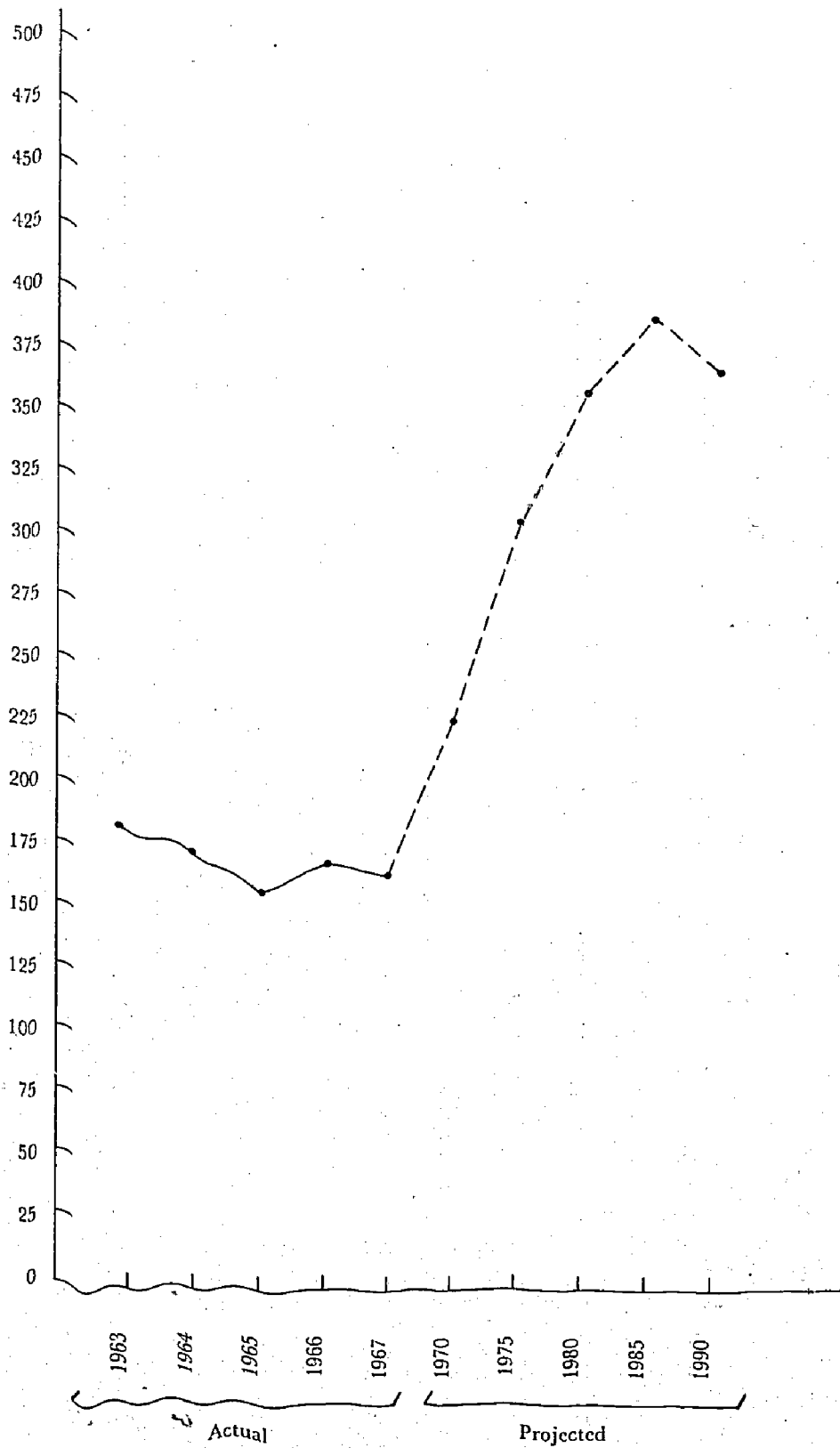
SPACES NEEDED FOR TENNESSEE MEDICAL STUDENTS  
IN ALL MEDICAL SCHOOLS: PROJECTIONS TO 1990\*



\*Based Upon Live births 22 years earlier

FIGURE 12

SPACES NEEDED FOR TENNESSEE MEDICAL STUDENTS  
IN TENNESSEE MEDICAL SCHOOLS: PROJECTIONS TO 1990\*



\*Based upon Bachelor's Degrees Awarded in Tennessee

Because of a relatively stable birth rate between 1947 and 1964, the projection based on that factor indicates relatively little change in the number of applicants to medical school from the present through about 1980 with a slight decrease beginning in that year. Projections based on bachelor's degrees to be awarded, on the other hand, suggest a definite increase in applicants to medical school during the same period due to the expectation that more and more students will earn bachelor's degrees. However, in recent years there has been a decline in the percentage of Tennessee graduates who apply to medical school. Thus, the latter projection may overestimate demand. The true picture probably lies somewhere between the two projections, and will no doubt be influenced by many factors which we cannot now predict. It does appear, however, that Tennessee students who are qualified to study medicine and who wish to study in the state will require an additional 25 or 30 spaces by 1975, permitting approximately 230 Tennesseans to study in the state. By 1980 spaces for about 265 are likely to be needed.

*How Well Does Tennessee Retain Its Medical  
Graduates For Practice In The State?*

Tennessee loses most of the physicians who earn their medical degrees in the state. Over 9,000 Tennessee educated physicians were still practicing in 1967; of these, 30% were practicing in Tennessee. Only seven states have retained as small a percentage of their medical graduates as Tennessee, yet none of these produce as many as Tennessee. Among the 37 states which have medical schools, Tennessee ranks seventh in the production of M.D.'s, but 30th in its ability to retain its graduates. (Appendix Table 35)

TABLE D  
GRADUATES OF THE TENNESSEE MEDICAL SCHOOLS BY LOCATION OF  
PRACTICE, AS OF 12/31/67

| <i>Institutions</i>     | <i>No.<br/>Graduates</i> | <i>% Practicing<br/>in Tennessee</i> | <i>% Practicing<br/>in Other<br/>SE States</i> | <i>% Practicing<br/>in States<br/>Outside SE</i> | <i>% Practicing<br/>in Foreign<br/>Countries</i> |
|-------------------------|--------------------------|--------------------------------------|--|--|--|
| University of Tennessee | 5,116                    | 39.58%                               | 31.76%   | 28.41%   | 0.25%  |
| Vanderbilt University   | 2,257                    | 27.69                                | 34.82  | 36.74  | 0.75   |
| Meharry Medical College | 2,087                    | 7.23                                 | 22.56  | 69.54  | 0.67   |
| Total                   | 9,460                    | 29.60%                               | 30.46%   | 39.48%   | 0.46%  |

Source: C. N. Theodore, G. E. Sutter, and J. N. Haug, *Medical School Alumni, 1967*. Chicago: American Medical Association, 1968.

The state has retained more of the graduates from the University of Tennessee than from the private schools. Forty percent of the University of Tennessee graduates were practicing in Tennessee, 28% of the Vanderbilt graduates, and 7% of the Meharry graduates.

Some states are characterized as "creditors" and some as "debtors" in terms of the number of physicians they license for practice. In a given year, a creditor state issues fewer medical licenses than the number of residents of the state who entered medical school five years earlier. Debtor states issue more licenses than there were residents entering medical school. Tennessee is clearly a creditor state, and there are only 7 greater creditors in the nation. (Appendix Table 36)

It would be expected that Tennessee residents who get their medical education at the University of Tennessee would be more likely to locate in Tennessee for practice than would students who have come from out-of-state. Four graduating classes from those of the last twenty years at the University of Tennessee College of Medicine were chosen for study as to present location of practice. Figure 13 indicates that Tennessee has kept about 55% of its own residents graduating from the University of Tennessee College of Medicine in the last twenty years, and only about 17% of those who were out-of-state students.

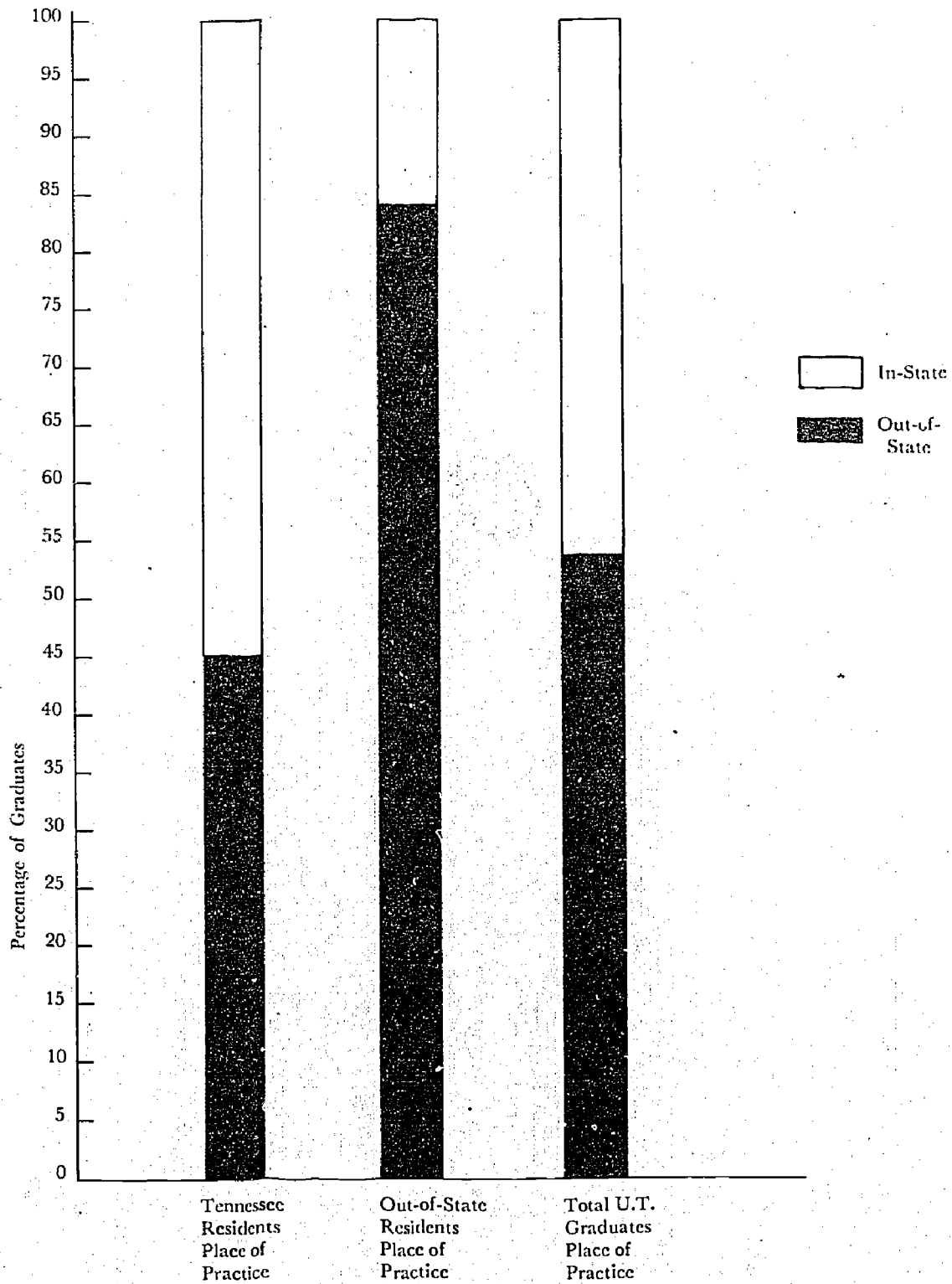
An effort was made to determine what influenced graduates of the four classes studied to set up practice in states other than Tennessee. A questionnaire was sent to 364 graduates of those four years who currently are practicing outside of Tennessee, and 207 responses were received. Their replies indicated that the factors which were most important in leading them to practice outside Tennessee were residency training out-of-state, more attractive openings for their specialties, opportunity to join another physician or group, and various social and cultural advantages pertaining to their families.

#### *How Well Is The University of Tennessee College Of Medicine Supported?*

Expenditures per medical student at the University of Tennessee are lower than those at most other medical schools. This is partly because the University operates a large school on a year-round basis, making maximum use of facilities and operating an efficient program. Year-round operation allows a student to complete the medical degree in three years rather than the usual four years. But the school is not funded adequately to carry on a high quality medical education program. Table E gives per student appropriations to the state-supported medical schools of five selected Southeastern states in 1969-70.

FIGURE 13

U.T. MEDICAL SCHOOL GRADUATES IN FOUR SELECTED YEARS:  
THEIR HOME STATE AND CURRENT PLACE OF PRACTICE



Source: U.T. Alumni Office for Records of Classes of 1950, 1955, 1960, and 1964

TABLE E  
PER STUDENT APPROPRIATIONS IN MEDICAL SCHOOLS  
OF FIVE SOUTHEASTERN STATES, 1969-70

|                        | <i>Appropriation per<br/>Student per Year</i> | <i>Appropriation per Student<br/>for Complete Program</i> |
|------------------------|---|---|
| Alabama                | \$4,972                                       | \$19,888  |
| Georgia                | 9,346   | 37,384  |
| Kentucky               | 5,053   | 20,212  |
| Mississippi            | 4,005   | 16,020  |
| Tennessee              | 4,346   | 13,038  |
| Average of five states | 5,544   | 21,308  |

The annual appropriation for Tennessee students is approximately 30% below the average of the five selected states. Tennessee's total appropriation for the complete education of a medical student is far below that of any of those states. Even with allowances for the lack of precision in per student cost estimations, it is clear that the University of Tennessee is not receiving an adequate state appropriation.

*What Will Be Required Of The State In Order To Maintain  
The University Of Tennessee College Of Medicine?*

In March of 1969 the University of Tennessee College of Medicine was visited by a survey team representing the American Medical Association and the Association of American Medical Colleges. That team released its report in October, 1969. U.T. was voted full accreditation for a term limited to three years and was requested to submit, in two years, a report concerning progress toward the following recommendations:

1. Construction of a new clinical sciences building
2. Construction of a new basic science facility
3. Increased financial support for program development
4. Development of a university-controlled hospital teaching facility
5. Development of a full-time planning staff
6. Planning and funding a new library
7. Further development of the departments of Preventive Medicine and Microbiology
8. Implementation of curricular changes

The cost of these improvements required to maintain accreditation is estimated to be 20 million dollars in capital outlay and an operating budget increase of \$1½ million per year. In order to qualify for Federal assistance in capital projects, the University will be required to increase medical enrollment by 20%, or 40 students.



# GRADUATE MEDICAL EDUCATION

## *How Well Do Tennessee's Intern And Residency Training Programs Draw Physicians For Training?*

Tennessee is not as active in the training of interns and residents as one might expect from the State's high level of activity in undergraduate medical education. There are 173 residents and 52 interns per million population in the United States, but only 143 residents and 45 interns per million in Tennessee. In 1968-69 there were 18 states, including three in the Southeast, which had more residents in training than did Tennessee and the same was generally true of interns. (Appendix Table 37)

There is not only the problem of providing openings for interns and residents, whose salaries are usually paid from hospital resources, but also the problem of attracting young physicians to fill them. There are more opportunities for graduate medical training each year than there are applicants. In 1968-69, 81% of Tennessee's residency openings were filled, compared with 83% in the nation as a whole. That same year 65% of Tennessee internships were occupied—fewer than the 74% occupied in the entire country. (Appendix Table 37)

Only hospitals in Memphis, Nashville, Chattanooga, and Knoxville-Oak Ridge have graduate training programs. There are considerably more residents and interns in the Nashville and Memphis hospitals than in the East Tennessee Hospitals.

TABLE F  
INTERNSHIP AND RESIDENCY POSITIONS  
OFFERED, AS OF JULY 1, 1970

| <i>Location</i>     | <i>Internships</i> | <i>Residencies</i> |
|---------------------|--------------------|--------------------|
| Chattanooga         | 16                 | 73                 |
| Knoxville-Oak Ridge | 20                 | 42                 |
| Nashville           | 107                | 305                |
| Memphis             | 143                | 375                |
| Total               | 286                | 795                |

Source: "Directory of Approved Internships and Residencies," *Journal of the American Medical Association*, Vol. 210, No. 8, November 24, 1969.

An effort was made to obtain information on the degree of occupancy of each graduate training program in Tennessee hospitals throughout



the 1960's. The hospitals supplied what data they had, but the survey was not a complete one. It does appear to be clear, however, that the hospitals which are affiliated actively with a medical school have attracted trainees better than those not so affiliated. This is the case, not only in Tennessee, but throughout the country. It is not because of differences in salaries; interns and residents in non-affiliated hospitals are offered salaries as high as those in the affiliated hospitals. (Appendix Table 38) It is significant that none of the East Tennessee hospitals which offer graduate training are medical school affiliated.

*How Well Are Graduates Of Tennessee's Medical Schools Retained In The State For Their Graduate Training?*

If more of the graduates of medical schools in Tennessee were to remain in the state for their internship and residency training, more might stay for practice. In 1968, 41% of the graduates of Tennessee's three medical schools who were interning anywhere did so in the state. This rate of retention for graduates for in-state internship compares well with that of most states, although four Southeastern states do retain better. (Appendix Table 39) Of all Tennessee medical graduates who were doing residencies in 1968 only 32% were in the state. The residency retention rate is poor. In fact, only two Southeastern states had a poorer retention record that year. (Appendix Table 39)

*Are More Intern And Residency Programs Planned In Tennessee?*

A survey was made of all Tennessee hospitals of more than 200 beds which do not have intern or residency training to ascertain if any were considering starting programs. Four hospitals responded affirmatively, all in East Tennessee: Memorial Hospital in Johnson City (residency), Bristol Memorial Hospital (residency), East Tennessee State Hospital in Knoxville (psychiatric residency), and the Veterans Administration Hospital in Johnson City (some type of graduate training).

*What State Assistance To Graduate Medical Training Programs Would Be Helpful?*

Persons responsible for internship and residency programs were surveyed in regard to suggestions whereby the state of Tennessee might increase its supply of physicians through assistance to post-graduate training programs. Most of the returned questionnaires indicated that the state should consider making financial assistance available to the hospitals for graduate medical education, especially for use in interns

and residents salaries and fringe benefits, and also to add needed faculty to the hospital staff. Several respondents also felt closer ties should be developed between the medical schools and the graduate training programs.

## CONCLUSIONS

1. Only a few other Southeastern states are as well supplied with physicians as is Tennessee, yet Tennessee's supply is considerably behind the national average. Tennessee has 119 active physicians per 100,000 people. In the Southeast there are 113 per 100,000 and in the United States, 145 per 100,000. There is no other state with a per capita income as low as Tennessee's which has a better supply of physicians. The number of physicians in Tennessee is increasing, but it is growing only slightly more rapidly than population growth; and the gap between the Tennessee physician-population ratio and that of the nation is not being closed. The shortage in Tennessee is not due to a lack of medical education in the state; it is due instead to our failure to retain a sufficient number of physicians who are educated here. Of all the Tennessee educated physicians who were still practicing medicine in 1967, only 30% were practicing in the state. There are only seven states in the country which retain a smaller percentage.
2. A considerable increase in the number of physicians practicing in Tennessee will be needed to correct the shortage which presently exists and to replace those who will retire or die. It is not possible to make a precise estimate of the number of physicians who will be needed in the next several decades, because substantial changes in the way health care is delivered may take place. However, Tennessee should adopt as a goal by 1980 a physician-population ratio as good as the 1967 national average. To meet this goal we will need to add 3,400 doctors in Tennessee by 1980 to those who are currently active. Over the years about 40% of Tennessee doctors have come from medical schools outside the state. If this continues, about 1,360 of the additional doctors needed will move into Tennessee from schools in other states, and we will need to retain 2,040 of those who graduate in Tennessee. Assuming that the Tennessee schools continue to produce at the rate which has characterized them for a number of years, it would be necessary to retain about 64% of their graduates between 1970 and 1980. However, both Vanderbilt and Meharry are planning to increase their enrollment and if the University of Tennessee increases by about 20%, it will be necessary to retain only 56% of the graduates. In either event, the state must have a much better rate of retention of medical

graduates than the present 30%, if it is to reach the 1967 national average supply of physicians by 1980.

3. Some parts of the state are much better supplied with physicians than others. Most of the physicians are concentrated in the metropolitan areas. This is to be expected, because the people themselves are concentrated there, because the most elaborate and specialized medical facilities are there, and because metropolitan area doctors serve people from outlying areas. However, **there are many areas of the state in which people have a great deal of difficulty in finding access to a physician.** There are seven counties in which no more than one physician practices and thirteen in which there are not more than two physicians. **The supply of physicians becomes poorer as one moves from west to east across the state.** Much of the regional difference in supply of physicians is due to the presence of more interns, residents, and medical faculty in Memphis and Nashville where the medical schools are located. Without the faculty, interns, and residents associated with the medical schools, the physician-population ratio in those regions is about the same as in East Tennessee. Yet it must be recognized that these medical school physicians do make a substantial contribution to the care of patients and from this point of view, East Tennessee needs a better supply. **The ratio of physicians to population is some three times better in the metropolitan areas than in the non-metropolitan areas of the state.** Most of the specialists practice in the larger cities where there are the facilities which they need in their work. **There is a need for more general practitioners, pediatricians, obstetricians, and others who serve in primary patient care, rather than as consultants on the referral of some other physician; and these primary physicians need to be attracted to those parts of the state which are the most poorly supplied.** New specialists are being developed to train physicians for work in smaller communities, such as residencies in community medicine and family practice. The medical schools of the state and the hospitals which train interns and residents should place greater emphasis on such training to help alleviate the doctor shortage outside of the metropolitan areas.
4. Many factors influence a physician's decision about where he will practice. They, like other professionals, tend to choose places in which there is good financial opportunity and which provide attractive educational, social, and recreational environments for their families. They also prefer to practice where they have facilities to

provide their patients high quality care and where there are opportunities to work with other physicians, so that they do not have to be on duty unreasonably long hours. Most of these are factors which are not highly susceptible to influence by the state's higher education system, and they must be attacked by the public and appropriate medical agencies. There are other things, however, which influence the decision and which are related to education. Most of Tennessee's physicians (60%) received their M.D. degrees in the state, and about 50% did their graduate (internship and/or residency) training in the state. It has been found nation-wide that physicians tend to locate in states where they receive their medical education, particularly those where they have their graduate training. The maintenance of strong, well-utilized internship and residency training in Tennessee's hospitals is an important factor in overcoming the shortage of physicians. There are some changes in the educational system which might have a favorable effect on the number of physicians who decide to locate in Tennessee for practice:

- (a) Provide more spaces for Tennesseans in existing medical schools.
- (b) Put more emphasis in both medical school and in graduate (internship and residency) training on the primary physician specialties.
- (c) Develop clinical education centers in the metropolitan areas of East Tennessee.
- (d) Orient medical students, interns, and residents toward those parts of the state where the physician shortage is greatest, particularly East Tennessee.
- (e) Fill a larger percentage of internships and residencies that are offered in the state and, as this is successful, expand this graduate training.

Each of these ideas is discussed in more detail in other sections of the summary.

5. Tennessee is a leader in the nation in the production of medical doctors. The three medical schools in Tennessee graduate more M.D.'s than do the schools of any other Southeastern state, between 240 and 290 per year in recent years. Only nine states produce more physicians and all of these are states which are larger and wealthier. Tennessee is fourth among all the states in the ratio of medical graduates to population. The University of Tennessee



College of Medicine is one of the country's largest and would require additional teaching facilities in order to expand enrollment. Vanderbilt and Meharry are adding to their medical facilities and recently have increased their enrollment somewhat. Both hope to expand still further, but would require additional operating funds in order to do so. Slightly less than half of the students admitted to Tennessee's medical schools are from other states (48% in 1968). A majority of the out-of-state students attend Vanderbilt and Meharry. The University of Tennessee's out-of-state admissions have declined in the last two or three years to only 10% in 1970. The state retains University of Tennessee graduates who originally were from Tennessee much better than those who came from other states (55% vs. 17%), and the same is probably true of Vanderbilt and Meharry graduates. **An increase in the proportion of Tennessee students in all three medical schools should help in overcoming the doctor shortage.** As long as there are enough qualified Tennesseans the University of Tennessee should limit the admission of out-of-state students to no more than 10% of each entering class. Ten percent of the spaces should be sufficient to take care of some out-of-state students who are special cases, such as exceptional students and children of alumni.

6. **Tennessee students find it easier to gain admission to medical school than do residents of most other states.** A higher percentage of them are successful in being admitted, and they find it necessary to apply to fewer schools than do students from most other states. One reason for this is the large number of medical school spaces that are available in relation to our population. Nearly 90% of Tennesseans who go to medical school attend in the state.
7. **The University of Tennessee College of Medicine is poorly supported in comparison with the medical schools operated by neighboring states, with an annual per student appropriation about 30% below the average of five selected Southeastern states.** The school's recent accreditation study by the American Medical Association and the Association of American Medical Colleges pointed up a number of deficiencies. The operating budget request for 1971-72 provides for a 30% increase in the support for the Medical Units, which will be adequate to enable them to overcome some, but not all, of these deficiencies. It should also enable them to begin putting more emphasis on family and community medicine, which will be important in orienting their students toward practice in smaller communities.

In addition to needed increases in operating budgets, the University, in order to meet the recommendations from the accrediting visit, must provide a new basic sciences building, a new clinical sciences building, and a new library. The cost of the basic sciences building has been estimated at about \$9,000,000 of which approximately half may be obtained from matching Federal construction grants, provided the University expands the size of its entering class. A similar provision applies to matching Federal grants for construction of the clinical sciences building, which is also estimated to cost \$9,000,000. The capital fund request to the 1971 legislature includes \$6,000,000 to be applied to the state's share of the cost of these two new buildings. Three million dollars in state funds is already available for these projects. These buildings are high priority needs and should be constructed as soon as possible.

8. We have already indicated that a new medical school is not needed to supply more graduates for practice in Tennessee, since the existing schools in Tennessee will turn out far more doctors than will be required for practice in the state. But there is another type of demand which must be considered, and that is the demand from qualified Tennesseans for admission to medical school. A larger percent of Tennessee applicants are admitted to medical school than the national average. Evidence from admission test scores also indicates that there is a relatively small number of students who might be qualified who do not get into medical school. In 1968, for example, only 30 Tennessee applicants who scored average or better on the Medical College Admission Test were not admitted to medical school. This number does not justify the development of another school in Tennessee at this time. In the next decade, it is likely that the number of qualified students desiring medical education will increase. Based on the increase in the number of students who will be earning bachelor's degrees, we probably will need some 25 or 30 additional spaces for medical students in Tennessee by 1975 and still another 30 to 35 spaces by 1980.

There is potential for some growth in all three of Tennessee's medical schools. The University of Tennessee will need to expand the size of its entering class by about 40 additional students a year to qualify for matching federal construction grants. Vanderbilt and Meharry are already working toward expanded enrollment, but they face a serious shortage of operating funds. Tennessee should contract with Vanderbilt and Meharry to provide operating support for the admission of about 20 additional Tennessee students



(ten at each school) during the next few years. The students would be additional to the average number of Tennesseans in entering classes at Vanderbilt and Meharry for the past several years. State support to these private medical schools for each additional Tennessee student should not exceed state appropriation to the University of Tennessee per medical student. These steps should provide opportunities for medical study for all qualified Tennesseans for the foreseeable future.

9. The cost of public and private medical school expansion to meet the modest demand from students for additional spaces would be much less than the expense of developing and operating a new medical school. The smallest efficient size for a medical school is one which admits about 100 students a year. Tennessee already trains so many doctors that it should not consider establishing a new school during the next decade.

Depending on what facilities were already available, most medical schools developed in the last few years have cost between \$50,000,000 and \$100,000,000 for construction alone. Even if it could be operated as economically as the present University of Tennessee College of Medicine, at least \$2,000,000 a year would be required in operating appropriations for a new medical school. The support of 20 additional students per year at the private medical schools recommended above would require about \$400,000 a year when all four classes were enrolled. The 40 expanded spaces at the University of Tennessee each year would probably cost less per student than is required for the students presently enrolled there, if the final year of their training were carried on at a hospital in another part of the state. If the additional spaces were to cost as much as the present ones, they would require about \$800,000 a year. The recommended expansions would require little capital outlay beyond what must be provided at Memphis anyway to meet accreditation requirements for modernization and improvement of facilities. The capital expenditures required at Memphis would not be much less if there were no expansion in the size of the entering class. With no expansion the state would have to pay the entire cost of the new facilities, rather than being able to share the cost with the Federal Government.

10. There are considerably more places for interns and residents to study throughout the country than there are physicians to occupy them. Hospitals which operate these graduate training programs compete to some extent for young physicians, just as there is some

competition among the young doctors for the best internship and residency programs. Although Tennessee is one of the leading states in the nation in terms of undergraduate medical education, it has fewer interns and residents than many. Unless there are places in the state for graduates of the three medical schools to do their internships, they will have to leave the state whether they want to or not. There are already fewer internships offered in Tennessee than the combined graduating classes of the three schools. With the expansion anticipated at Vanderbilt and Meharry Medical School there will soon be even a greater shortage of internships. It is true that all of those presently available are not filled, so they must be made more attractive as well as increased in number. Internships and residencies should be expanded and improved so that any doctor educated in Tennessee can remain for his further training if he wishes.

Most of Tennessee's graduate training programs are located in hospitals in Nashville and Memphis. The only internship and residency programs in East Tennessee are in Chattanooga and in Knoxville-Oak Ridge. None of those in East Tennessee have active affiliation with one of the medical schools, although the Memorial Hospital in Knoxville, which has both interns and residents, is a part of the Medical Units of the University of Tennessee for administrative purposes. Non-affiliated graduate programs do not attract young physicians as well as those which do have medical school affiliation. This has been apparent for some time, not only in Tennessee, but in the rest of the nation. Several hospitals in the Tri-Cities area are considering developing internship and/or residency programs, but none exist at present in that area. It is in East Tennessee, where the supply of physicians is poorest, that there are fewest attractive openings for interns and residents who might be persuaded to remain for practice. There are enough well-trained, board-certified physicians in East Tennessee to provide instruction in expanded residency and internship programs. This is true, not only in Knoxville and Chattanooga, but in the Tri-Cities area as well. Graduate training programs in East Tennessee should be strengthened and given active affiliation with the University of Tennessee College of Medicine, through the development of clinical centers, so more doctors will be attracted to that part of the state.

11. The medical curriculum has traditionally consisted of approximately two years spent in the study of basic medical sciences, pri-

marily a laboratory and classroom procedure, and approximately two years in clinical study working with patients under supervision. In recent years, some schools have begun to integrate the basic sciences and the clinical study to some degree, although the last year or so in most medical schools is still devoted primarily to clinical training, with the student rotating through the various services in the hospital under the supervision of faculty.

Several medical schools outside of Tennessee have begun to use hospitals away from the medical campus for clinical education of some of their students. This typically requires that some students move from the main medical campus to an affiliated hospital for the last year or so of their training. Often the students remain in that hospital for internship or residency training. The University of Tennessee Memorial Hospital in Knoxville and the Baroness Erlanger Hospital in Chattanooga already train interns and residents and have full-time medical faculty. They would be appropriate locations for the development of this type of clinical training for some medical students from the University of Tennessee College of Medicine. This development would be aimed toward keeping more physicians educated in Tennessee, and toward an increase in the number who locate for practice in East Tennessee. It also should permit the suggested increase in the number of students who are being admitted to the University of Tennessee College of Medicine without creating a need for more clinical faculty and facilities in Memphis. Better retention of graduates and better distribution of physicians into East Tennessee and the rural areas would be anticipated for the following reasons:

- (a) Affiliation of East Tennessee hospitals with a medical school should draw more interns and residents who might remain there for practice.
- (b) Those medical students who receive their clinical training in the newly affiliated centers should be more oriented toward the East Tennessee area and more likely to remain there for their graduate training and practice.
- (c) The development of these affiliated clinical centers should stimulate continuing education for physicians in East Tennessee, enhancing the acceptability of that area as a location for medical practice.
- (d) The availability of clinical training outside Memphis should provide the University of Tennessee students experience in a greater variety of settings and with a greater

variety of patients, increasing the likelihood of their practicing in some place other than a major medical center such as Memphis or Nashville.

While Chattanooga and Knoxville should be considered as sites for earliest development of clinical centers, efforts should be made to develop affiliated training in the Tri-Cities area as soon as possible. Since the Memorial Hospital in Knoxville already functions within the structure of the University of Tennessee Medical Units, it should most easily be developed as the first clinical center.

12. The U.T. Memorial Hospital in Knoxville should accept approximately 20 medical students from Memphis for their final year of clinical training as soon as possible. To accommodate them, it will be necessary to employ several additional full-time and part-time faculty working under the supervision of an Associate Dean of the University of Tennessee College of Medicine. An appropriation of \$200,000 has been requested for 1971-72 and students could be accepted during that year. Once that program is underway successfully, a similar one should be instituted at Barones Erlanger Hospital in Chattanooga. Hospitals in the Tri-Cities area should work toward similar graduate training and clinical training status. By the time students from the expanded enrollment at the University of Tennessee reach their final year, about 1977, there should be clinical training facilities available for about 40 students in the East Tennessee hospitals. The programs of these clinical centers should be designed to emphasize family practice and primary patient care rather than narrow referral-oriented specialties.

13. When fully implemented in four or five years, the costs of the major recommendations are listed below (all figures at current cost levels).

| <i>Recommendations</i>  | <i>Amount in Millions<br/>of Dollars</i> |
|---|--|
| (1) For increased operating support to eliminate deficiencies at the University of Tennessee College of Medicine (about 2/3 included as part of 71-72 budget request) | \$1.4-1.6                                |
| (2) For expansion of University of Tennessee Medical College by 40 students per year (not requested for 71-72)  | .6- .8                                   |

- |  |        |
|--|--------|
| (3) For establishment of two or three clinical centers in East Tennessee metropolitan area hospitals<br>( \$200,000 requested for 71-72) | .4- .9 |
| (4) For support of Tennesseans in the private medical schools (not included in 71-72 budget request)                                     | .4- .5 |

|            |           |
|------------|-----------|
| Total Cost | \$2.8-3.8 |
|------------|-----------|

While the cost of these recommendations is substantial, it would be less expensive than another state-supported medical school, particularly in the capital construction costs involved. The recommended actions should strengthen graduate medical training in East Tennessee and make practice in that area more desirable, accommodate the additional Tennessee students who will want to study medicine, make the University of Tennessee College of Medicine eligible for Federal assistance in necessary construction, and promote the retention of more graduates for practice in Tennessee.



## RECOMMENDATIONS

1. The state should provide more adequate support to the University of Tennessee College of Medicine.
2. Tennessee should work toward a goal of having by 1980 a supply of physicians which is as good as the present national average.
3. Clinical training centers for senior medical students should be established in East Tennessee, first at the University of Tennessee Memorial Hospital in Knoxville, second at Baroness Erlanger Hospital in Chattanooga, and later in hospitals in the Tri-Cities area.
4. The University of Tennessee College of Medicine should be expanded to admit 40 additional students per year and should limit out-of-state enrollment.
5. The state should contract with Vanderbilt University and Meharry Medical College to support the admission of ten additional Tennessee students per year at each school.

## APPENDIX



TABLE 1

NUMBER OF PHYSICIANS AND PHYSICIAN-POPULATION RATIOS  
IN THE SOUTHEASTERN UNITED STATES, 1963 AND 1967

| States              | 1963                          |                                  |                                       |                                  |                              |                                  | 1967                          |                                  |                                       |                                  |                              |                                  |
|---------------------|-------------------------------|----------------------------------|---------------------------------------|----------------------------------|------------------------------|----------------------------------|-------------------------------|----------------------------------|---------------------------------------|----------------------------------|------------------------------|----------------------------------|
|                     | Total<br>Active<br>Physicians | Ratio<br>to<br>Pop. <sup>b</sup> | MD in<br>Patient<br>Care <sup>a</sup> | Ratio<br>to<br>Pop. <sup>b</sup> | MD in<br>Private<br>Practice | Ratio<br>to<br>Pop. <sup>b</sup> | Total<br>Active<br>Physicians | Ratio<br>to<br>Pop. <sup>b</sup> | MD in<br>Patient<br>Care <sup>a</sup> | Ratio<br>to<br>Pop. <sup>b</sup> | MD in<br>Private<br>Practice | Ratio<br>to<br>Pop. <sup>b</sup> |
| United States       | 257,207                       | 135                              | 255,141                               | 134                              | 242,684                      | 128                              | 288,343                       | 145                              | 285,356                               | 143                              | 268,853                      | 135                              |
| Southeastern States | 42,151                        | 103                              | 41,469                                | 102                              | 39,867                       | 98                               | 47,658                        | 113                              | 46,696                                | 111                              | 44,576                       | 106                              |
| Alabama             | 2,792                         | 83                               | 2,758                                 | 82                               | 2,687                        | 80                               | 3,074                         | 87                               | 3,031                                 | 86                               | 2,907                        | 82                               |
| Arkansas            | 1,720                         | 95                               | 1,698                                 | 94                               | 1,638                        | 90                               | 1,768                         | 90                               | 1,749                                 | 89                               | 1,682                        | 86                               |
| Florida             | 6,686                         | 117                              | 6,570                                 | 115                              | 6,388                        | 112                              | 8,235                         | 134                              | 8,072                                 | 131                              | 7,837                        | 127                              |
| Georgia             | 4,379                         | 106                              | 4,296                                 | 104                              | 4,137                        | 103                              | 4,937                         | 111                              | 4,810                                 | 108                              | 4,593                        | 103                              |
| Kentucky            | 2,991                         | 97                               | 2,948                                 | 96                               | 2,822                        | 92                               | 3,303                         | 104                              | 3,247                                 | 102                              | 3,065                        | 97                               |
| Louisiana           | 4,003                         | 116                              | 3,958                                 | 114                              | 3,788                        | 109                              | 4,365                         | 119                              | 4,297                                 | 117                              | 4,103                        | 112                              |
| Mississippi         | 1,802                         | 82                               | 1,784                                 | 81                               | 1,734                        | 79                               | 1,917                         | 82                               | 1,894                                 | 81                               | 1,827                        | 78                               |
| North Carolina      | 4,861                         | 102                              | 4,779                                 | 101                              | 4,461                        | 94                               | 5,366                         | 107                              | 5,253                                 | 105                              | 4,893                        | 98                               |
| South Carolina      | 2,059                         | 82                               | 2,036                                 | 81                               | 1,977                        | 79                               | 2,368                         | 90                               | 2,342                                 | 89                               | 2,265                        | 86                               |
| Tennessee           | 4,183                         | 113                              | 4,109                                 | 111                              | 3,935                        | 107                              | 4,634                         | 119                              | 4,536                                 | 117                              | 4,286                        | 110                              |
| Virginia            | 4,949                         | 116                              | 4,832                                 | 113                              | 4,648                        | 109                              | 5,884                         | 129                              | 5,680                                 | 124                              | 5,412                        | 118                              |
| West Virginia       | 1,726                         | 97                               | 1,701                                 | 96                               | 1,652                        | 93                               | 1,807                         | 102                              | 1,785                                 | 101                              | 1,706                        | 97                               |

<sup>a</sup>Physicians in Private Practice plus Medical School Faculty

<sup>b</sup>Number of Physicians Per 100,000 Population

Source: C. N. Theodore and J. N. Haug, *Selected Characteristics of the Physician Population, 1963 and 1967*.

Chicago: American Medical Association, 1968.

TABLE 2

STATE POPULATION, PHYSICIAN-POPULATION RATIOS, AND PER CAPITA  
PERSONAL INCOME IN TERMS OF STATE RANKING

| <i>States</i>        | <i>Population<br/>Rank</i> | <i>MD/100,000<br/>Population*</i> | <i>Rank<br/>in Nation</i> | <i>Per Capita<br/>Personal<br/>Income</i> | <i>Rank in<br/>Nation</i> |
|----------------------|----------------------------|-----------------------------------|---------------------------|---|---------------------------|
| District of Columbia | 40                         | 480                               | 1                         | \$4,163                                   | 1                         |
| Rhode Island         | 39                         | 236                               | 2                         | 3,432                                     | 13                        |
| New York             | 2                          | 225                               | 3                         | 3,901                                     | 4                         |
| Maryland             | 18                         | 224                               | 4                         | 3,544                                     | 11                        |
| Massachusetts        | 10                         | 207                               | 5                         | 3,633                                     | 10                        |
| Connecticut          | 24                         | 186                               | 6                         | 4,110                                     | 2                         |
| California           | 1                          | 184                               | 7                         | 3,771                                     | 7                         |
| Colorado             | 30                         | 183                               | 8                         | 3,133                                     | 24                        |
| Vermont              | 49                         | 166                               | 9                         | 2,905                                     | 31                        |
| Minnesota            | 20                         | 151                               | 10                        | 3,169                                     | 21                        |
| Washington           | 22                         | 150                               | 11                        | 3,529                                     | 12                        |
| Pennsylvania         | 3                          | 149                               | 12                        | 3,248                                     | 18                        |
| Illinois             | 4                          | 139                               | 13                        | 3,807                                     | 5                         |
| Oregon               | 31                         | 139                               | 14                        | 3,190                                     | 19                        |
| New Jersey           | 8                          | 137                               | 15                        | 3,776                                     | 6                         |
| Florida              | 9                          | 136                               | 16                        | 2,999                                     | 29                        |
| Utah                 | 36                         | 136                               | 17                        | 2,631                                     | 39                        |
| Delaware             | 47                         | 135                               | 18                        | 3,653                                     | 9                         |
| Ohio                 | 6                          | 132                               | 19                        | 3,315                                     | 15                        |
| New Hampshire        | 44                         | 132                               | 20                        | 3,109                                     | 26                        |
| Arizona              | 34                         | 131                               | 21                        | 2,816                                     | 33                        |
| Virginia             | 14                         | 130                               | 22                        | 2,949                                     | 30                        |
| Hawaii               | 41                         | 130                               | 23                        | 3,307                                     | 16                        |
| Missouri             | 13                         | 125                               | 24                        | 3,044                                     | 28                        |
| Michigan             | 7                          | 123                               | 25                        | 3,393                                     | 14                        |
| Texas                | 5                          | 122                               | 26                        | 2,839                                     | 32                        |
| Wisconsin            | 16                         | 121                               | 27                        | 3,185                                     | 20                        |
| Nebraska             | 35                         | 120                               | 28                        | 3,134                                     | 23                        |
| Louisiana            | 19                         | 119                               | 29                        | 2,505                                     | 44                        |
| Tennessee            | 17                         | 118                               | 30                        | 2,427                                     | 46                        |
| Kansas               | 29                         | 117                               | 31                        | 3,136                                     | 22                        |
| Georgia              | 15                         | 110                               | 32                        | 2,627                                     | 40                        |
| New Mexico           | 37                         | 109                               | 33                        | 2,515                                     | 42                        |
| Maine                | 38                         | 107                               | 34                        | 2,664                                     | 37                        |
| Nevada               | 48                         | 107                               | 35                        | 3,759                                     | 8                         |
| North Carolina       | 11                         | 106                               | 36                        | 2,569                                     | 41                        |
| Montana              | 43                         | 106                               | 37                        | 2,811                                     | 34                        |
| Oklahoma             | 27                         | 105                               | 38                        | 2,770                                     | 35                        |
| Iowa                 | 25                         | 105                               | 39                        | 3,101                                     | 27                        |

TABLE 2

STATE POPULATION, PHYSICIAN-POPULATION RATIOS, AND PER CAPITA  
PERSONAL INCOME IN TERMS OF STATE RANKING (continued)

| <i>States</i>  | <i>Population<br/>Rank</i> | <i>MD/100,000<br/>Population*</i> | <i>Rank<br/>in Nation</i> | <i>Per Capita<br/>Personal<br/>Income</i> | <i>Rank in<br/>Nation</i> |
|----------------|----------------------------|-----------------------------------|---------------------------|---|---------------------------|
| Wyoming        | 50                         | 104                               | 40                        | 3,113                                     | 25                        |
| Kentucky       | 23                         | 103                               | 41                        | 2,488                                     | 45                        |
| North Dakota   | 46                         | 102                               | 42                        | 2,513                                     | 43                        |
| West Virginia  | 33                         | 100                               | 43                        | 2,366                                     | 47                        |
| Indiana        | 12                         | 99                                | 44                        | 3,259                                     | 17                        |
| Alaska         | 51                         | 94                                | 45                        | 3,941                                     | 3                         |
| Idaho          | 42                         | 93                                | 46                        | 2,653                                     | 38                        |
| South Carolina | 26                         | 90                                | 47                        | 2,260                                     | 48                        |
| Arkansas       | 32                         | 90                                | 48                        | 2,184                                     | 50                        |
| South Dakota   | 45                         | 90                                | 49                        | 2,717                                     | 36                        |
| Alabama        | 21                         | 87                                | 50                        | 2,209                                     | 49                        |
| Mississippi    | 28                         | 82                                | 51                        | 1,904                                     | 51                        |
| TOTAL U.S.     | —                          | 146                               | —                         | \$3,239                                   | —                         |

\* Represents total active physicians

Source: *Journal of the American Medical Association*, Vol. 206, No. 9, November 25, 1968.

TABLE 3  
PERCENTAGE DISTRIBUTION OF PHYSICIANS BY TYPE  
OF PRACTICE IN THE U.S. AND TENNESSEE  
1967

| <i>Type of Practice</i>     | <i>United States</i> |          | <i>Tennessee</i> |          |
|-----------------------------|----------------------|----------|------------------|----------|
|                             | <i>No.</i>           | <i>%</i> | <i>No.</i>       | <i>%</i> |
| <i>General Practice</i>     | 68,920               | 22.5%    | 1,069            | 22.3%    |
| <i>Medical Specialty</i>    |                      |          |                  |          |
| Allergy                     | 962                  | 0.3      | 7                | 0.1      |
| Cardiovascular Disease      | 2,263                | 0.7      | 35               | 0.7      |
| Dermatology                 | 3,796                | 1.2      | 38               | 0.8      |
| Gastroenterology            | 749                  | 0.2      | 10               | 0.2      |
| Internal Medicine           | 42,325               | 13.8     | 598              | 12.5     |
| Pediatrics                  | 17,348               | 5.7      | 310              | 6.5      |
| Pediatric Allergy           | 91                   | *        | 4                | 0.1      |
| Pediatric Cardiology        | 175                  | 0.1      | 2                | *        |
| Pulmonary Disease           | 1,218                | 0.4      | 20               | 0.4      |
| Total                       | 68,927               | 22.5%    | 1,024            | 21.4%    |
| <i>Surgical Specialty</i>   |                      |          |                  |          |
| General Surgery             | 29,687               | 9.7%     | 602              | 12.6%    |
| Neurological Surgery        | 2,315                | 0.8      | 66               | 1.4      |
| Obstetrics & Gynecology     | 17,964               | 5.9      | 281              | 5.9      |
| Ophthalmology               | 9,083                | 3.0      | 136              | 2.8      |
| Orthopedic Surgery          | 8,426                | 2.7      | 163              | 3.4      |
| Otolaryngology              | 5,583                | 1.8      | 86               | 1.8      |
| Plastic Surgery             | 1,303                | 0.4      | 23               | 0.5      |
| Colon & Rectal Surgery      | 644                  | 0.2      | 8                | 0.2      |
| Thoracic Surgery            | 1,725                | 0.6      | 49               | 1.0      |
| Urology                     | 5,462                | 1.8      | 98               | 2.0      |
| Total                       | 82,192               | 26.8%    | 1,512            | 31.6%    |
| <i>Other Specialty</i>      |                      |          |                  |          |
| Aviation Medicine           | 792                  | 0.3%     | 9                | 0.2%     |
| Anesthesiology              | 9,630                | 3.1      | 126              | 2.6      |
| Child Psychiatry            | 1,080                | 0.4      | 3                | 0.1      |
| Diagnostic Roentgenology    | 49                   | *        | 0                | 0.0      |
| Forensic Pathology          | 47                   | *        | 0                | 0.0      |
| Neurology                   | 2,466                | 0.8      | 23               | 0.5      |
| Occupational Medicine       | 1,706                | 0.6      | 46               | 1.0      |
| Psychiatry                  | 19,749               | 6.4      | 172              | 3.6      |
| Pathology                   | 9,471                | 3.1      | 168              | 3.5      |
| Physical Medicine           | 1,208                | 0.4      | 12               | 0.3      |
| General Preventive Medicine | 1,007                | 0.3      | 14               | 0.3      |

PERCENTAGE DISTRIBUTION OF PHYSICIANS BY TYPE  
OF PRACTICE IN THE U.S. AND TENNESSEE  
1967 (continued)

| <i>Type of Practice</i> | <i>United States</i> |          | <i>Tennessee</i> |          |
|-------------------------|----------------------|----------|------------------|----------|
|                         | <i>No.</i>           | <i>%</i> | <i>No.</i>       | <i>%</i> |
| Public Health           | 1,627                | 0.5      | 38               | 0.8      |
| Radiology               | 10,727               | 3.5      | 193              | 4.0      |
| Therapeutic Radiology   | 101                  | *        | 1                | *        |
| Total                   | 59,660               | 19.4%    | 805              | 16.8%    |
| Not Recognized          | 4,101                | 1.3%     | 48               | 1.0%     |
| Unspecified**           | 23,170               | 7.5      | 329              | 6.9      |
| GRAND TOTAL             | 306,970              | 100.0%   | 4,787            | 100.0%   |

\* Less than 0.05%

\*\* Includes Inactive Physicians

Source: C. N. Theodore and J. N. Haug, *Selected Characteristics of the Physician Population, 1963 and 1967*. Chicago: American Medical Association, 1968.

TABLE 4

NUMBER OF PHYSICIANS REGISTERED IN TENNESSEE COUNTIES, 1961-70

| <i>Counties</i> | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | <i>% Increase<br/>1961-70</i> |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------------------------------|
| Anderson        | 58   | 60   | 58   | 65   | 68   | 70   | 69   | 68   | 70   | 67   | 15.51%                        |
| Bedford         | 13   | 14   | 14   | 14   | 15   | 15   | 17   | 16   | 15   | 16   | 23.07                         |
| Benton          | 7    | 7    | 6    | 6    | 6    | 7    | 7    | 7    | 8    | 6    | (14.28)                       |
| Bledsoe         | 3    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | (33.33)                       |
| Blount          | 44   | 45   | 41   | 43   | 46   | 45   | 42   | 46   | 50   | 52   | 18.18                         |
| Bradley         | 27   | 25   | 28   | 30   | 32   | 30   | 31   | 31   | 31   | 32   | 18.51                         |
| Campbell        | 18   | 17   | 15   | 12   | 12   | 10   | 11   | 10   | 11   | 11   | 38.88                         |
| Cannon          | 3    | 4    | 4    | 4    | 3    | 3    | 3    | 3    | 3    | 4    | 33.33                         |
| Carroll         | 9    | 9    | 10   | 8    | 11   | 9    | 10   | 10   | 10   | 10   | 11.11                         |
| Carter          | 18   | 18   | 23   | 21   | 19   | 19   | 18   | 18   | 18   | 20   | 11.11                         |
| Cheatham        | 2    | 2    | 2    | 2    | 3    | 2    | 3    | 2    | 2    | 2    | 0.00                          |
| Chester         | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 4    | 33.33                         |
| Claiborne       | 5    | 5    | 5    | 6    | 5    | 5    | 6    | 6    | 5    | 7    | 40.00                         |
| Clay            | 1    | 1    | 1    | 1    | 1    | 1    | 3    | 3    | 4    | 4    | 300.00                        |
| Cocke           | 10   | 9    | 8    | 6    | 6    | 7    | 6    | 6    | 8    | 6    | (40.00)                       |
| Coffee          | 19   | 18   | 17   | 17   | 18   | 18   | 19   | 20   | 18   | 18   | ( 5.26)                       |
| Crockett        | 7    | 7    | 6    | 6    | 7    | 7    | 6    | 6    | 6    | 5    | (28.57)                       |
| Cumberland      | 15   | 13   | 13   | 14   | 14   | 18   | 16   | 16   | 16   | 16   | 6.66                          |
| Davidson        | 638  | 646  | 661  | 696  | 692  | 729  | 736  | 749  | 774  | 835  | 30.37                         |
| Decatur         | 4    | 4    | 5    | 5    | 6    | 6    | 6    | 5    | 3    | 3    | (25.00)                       |
| Dekalb          | 5    | 5    | 5    | 5    | 4    | 4    | 5    | 4    | 5    | 6    | 20.00                         |
| Dickson         | 12   | 13   | 11   | 12   | 13   | 14   | 11   | 12   | 12   | 11   | ( 8.33)                       |
| Dyer            | 25   | 27   | 28   | 25   | 26   | 27   | 25   | 25   | 29   | 26   | 4.00                          |
| Fayette         | 11   | 7    | 8    | 8    | 8    | 8    | 7    | 7    | 7    | 7    | (36.36)                       |
| Fentress        | 4    | 4    | 4    | 4    | 4    | 4    | 5    | 6    | 4    | 4    | 0.00                          |
| Franklin        | 13   | 13   | 13   | 14   | 13   | 13   | 12   | 12   | 11   | 12   | ( 7.69)                       |
| Gibson          | 24   | 25   | 27   | 26   | 25   | 26   | 26   | 27   | 29   | 27   | 12.50                         |
| Giles           | 11   | 10   | 10   | 10   | 10   | 10   | 10   | 11   | 10   | 8    | (27.27)                       |
| Grainger        | 3    | 3    | 3    | 3    | 3    | 3    | 2    | 2    | 2    | 2    | (33.33)                       |
| Greene          | 23   | 20   | 20   | 21   | 20   | 20   | 21   | 24   | 25   | 25   | 8.69                          |
| Grundy          | 1    | 2    | 2    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | 0.00                          |
| Hamblen         | 21   | 20   | 20   | 20   | 19   | 20   | 21   | 21   | 22   | 25   | 19.04                         |
| Hamilton        | 303  | 303  | 312  | 313  | 317  | 319  | 326  | 330  | 332  | 350  | 15.51                         |
| Hancock         | 2    | 1    | 1    | 2    | 1    | 1    | 1    | 1    | 1    | 1    | (50.00)                       |
| Hardeman        | 15   | 15   | 12   | 11   | 11   | 11   | 10   | 10   | 11   | 10   | (33.33)                       |
| Hardin          | 7    | 6    | 7    | 7    | 7    | 8    | 10   | 10   | 10   | 11   | 57.14                         |
| Hawkins         | 15   | 13   | 14   | 15   | 14   | 14   | 12   | 11   | 11   | 11   | (26.66)                       |
| Haywood         | 12   | 9    | 11   | 11   | 9    | 9    | 9    | 9    | 8    | 8    | (33.33)                       |
| Henderson       | 5    | 6    | 8    | 7    | 7    | 6    | 6    | 6    | 7    | 7    | (40.00)                       |
| Henry           | 19   | 17   | 15   | 15   | 16   | 16   | 17   | 16   | 16   | 17   | (10.52)                       |
| Hickman         | 3    | 3    | 3    | 3    | 4    | 4    | 4    | 4    | 4    | 3    | 0.00                          |
| Houston         | 1    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 3    | 200.00                        |
| Humphreys       | 7    | 7    | 6    | 8    | 8    | 8    | 8    | 8    | 8    | 7    | 0.00                          |





# OF PHYSICIANS REGISTERED IN TENNESSEE COUNTIES, 1961-70 (con.)

|       | 1961 | 1962 | 1963 | 1964  | 1965  | 1966  | 1967  | 1968  | 1969  | 1970  | % Increase<br>1961-70 |
|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-----------------------|
|       | 6    | 7    | 5    | 5     | 5     | 4     | 5     | 5     | 4     | 4     | (33.33)               |
|       | 12   | 12   | 12   | 12    | 13    | 13    | 13    | 12    | 12    | 10    | (16.66)               |
|       | 2    | 2    | 2    | 2     | 2     | 2     | 3     | 3     | 4     | 3     | 50.00                 |
|       | 348  | 356  | 370  | 368   | 352   | 384   | 377   | 382   | 404   | 410   | 17.81                 |
|       | 5    | 4    | 3    | 3     | 3     | 4     | 3     | 3     | 3     | 3     | (40.00)               |
| ale   | 10   | 10   | 11   | 11    | 11    | 11    | 9     | 10    | 10    | 8     | (20.00)               |
| c     | 13   | 12   | 12   | 13    | 13    | 13    | 11    | 12    | 13    | 14    | 7.69                  |
|       | 3    | 2    | 3    | 4     | 4     | 3     | 6     | 1     | 2     | 2     | (33.33)               |
|       | 15   | 15   | 14   | 14    | 13    | 13    | 14    | 16    | 15    | 15    | 0.00                  |
|       | 9    | 9    | 10   | 9     | 9     | 9     | 9     | 9     | 8     | 8     | (11.11)               |
|       | 22   | 25   | 24   | 23    | 20    | 23    | 23    | 24    | 21    | 22    | 0.00                  |
|       | 8    | 8    | 8    | 5     | 7     | 6     | 6     | 6     | 5     | 5     | (37.50)               |
|       | 5    | 4    | 3    | 5     | 6     | 6     | 5     | 5     | 5     | 5     | 0.00                  |
|       | 63   | 61   | 64   | 64    | 67    | 67    | 70    | 72    | 73    | 77    | 22.22                 |
|       | 9    | 9    | 10   | 9     | 11    | 9     | 11    | 10    | 10    | 11    | 22.22                 |
|       | 14   | 12   | 12   | 12    | 13    | 13    | 12    | 14    | 13    | 14    | 0.00                  |
|       | 32   | 30   | 31   | 34    | 35    | 32    | 31    | 30    | 29    | 30    | ( 6.25)               |
|       | 2    | 3    | 2    | 2     | 1     | 1     | 2     | 2     | 2     | 2     | 0.00                  |
|       | 12   | 11   | 13   | 13    | 12    | 13    | 14    | 12    | 11    | 11    | ( 8.33)               |
| inery | 33   | 32   | 34   | 34    | 37    | 39    | 38    | 40    | 39    | 41    | 24.24                 |
|       | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0.00                  |
|       | 5    | 5    | 2    | 2     | 2     | 3     | 2     | 2     | 2     | 2     | (60.00)               |
|       | 30   | 27   | 27   | 27    | 28    | 27    | 29    | 28    | 28    | 28    | ( 6.66)               |
|       | 5    | 5    | 5    | 6     | 6     | 5     | 5     | 5     | 5     | 6     | 20.00                 |
|       | 2    | 2    | 2    | 2     | 2     | 2     | 2     | 2     | 2     | 1     | (50.00)               |
|       | 0    | 0    | 0    | 0     | 0     | 0     | 1     | 0     | 2     | 3     | 100.00                |
|       | 7    | 7    | 6    | 6     | 6     | 8     | 8     | 5     | 5     | 6     | (14.28)               |
|       | 20   | 20   | 17   | 19    | 20    | 20    | 20    | 20    | 21    | 24    | 20.00                 |
|       | 7    | 8    | 8    | 7     | 9     | 9     | 8     | 8     | 8     | 9     | 28.57                 |
|       | 22   | 24   | 23   | 23    | 24    | 23    | 22    | 21    | 21    | 21    | ( 4.54)               |
| n     | 17   | 17   | 17   | 19    | 17    | 17    | 14    | 14    | 13    | 11    | (35.29)               |
| rd    | 34   | 43   | 49   | 53    | 56    | 50    | 50    | 54    | 54    | 54    | 58.82                 |
|       | 8    | 8    | 8    | 6     | 6     | 6     | 6     | 6     | 6     | 6     | (25.00)               |
| ie    | 3    | 2    | 2    | 2     | 2     | 2     | 2     | 2     | 2     | 4     | 33.33                 |
|       | 9    | 10   | 12   | 11    | 12    | 12    | 10    | 10    | 10    | 13    | 44.44                 |
|       | 948  | 968  | 999  | 1,037 | 1,071 | 1,083 | 1,143 | 1,170 | 1,201 | 1,212 | 27.84                 |
|       | 7    | 6    | 6    | 6     | 6     | 7     | 8     | 7     | 6     | 6     | (14.28)               |
|       | 5    | 5    | 4    | 4     | 4     | 3     | 3     | 3     | 4     | 4     | (20.00)               |
|       | 132  | 140  | 142  | 142   | 144   | 143   | 140   | 145   | 160   | 174   | 31.81                 |
|       | 20   | 21   | 22   | 22    | 21    | 22    | 23    | 18    | 21    | 21    | 5.00                  |
|       | 11   | 12   | 11   | 9     | 12    | 11    | 10    | 12    | 11    | 11    | 0.00                  |
| e     | 2    | 2    | 2    | 2     | 2     | 2     | 3     | 2     | 1     | 1     | (50.00)               |
|       | 8    | 8    | 8    | 7     | 7     | 6     | 5     | 4     | 6     | 4     | (50.00)               |
|       | 1    | 1    | 1    | 1     | 2     | 2     | 2     | 1     | 1     | 1     | 0.00                  |

NUMBER OF PHYSICIANS REGISTERED IN TENNESSEE COUNTIES, 1961-70 (con.)

| Counties       | 1961  | 1962  | 1963  | 1964  | 1965  | 1966  | 1967  | 1968  | 1969  | 1970  | % Increase<br>1961-70 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------|
| Van Buren      | 1     | 1     | 2     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 0.00                  |
| Warren         | 13    | 14    | 11    | 10    | 13    | 12    | 11    | 12    | 12    | 11    | (15.38)               |
| Washington     | 82    | 83    | 88    | 89    | 87    | 87    | 86    | 86    | 91    | 92    | 12.19                 |
| Wayne          | 2     | 3     | 3     | 3     | 3     | 2     | 2     | 3     | 3     | 3     | 50.00                 |
| Weakley        | 12    | 12    | 13    | 14    | 15    | 15    | 13    | 16    | 11    | 11    | ( 8.33)               |
| White          | 7     | 7     | 8     | 8     | 8     | 8     | 7     | 7     | 8     | 7     | 0.00                  |
| Williamson     | 14    | 14    | 14    | 12    | 15    | 16    | 13    | 14    | 15    | 14    | 0.00                  |
| Wilson         | 15    | 18    | 15    | 17    | 16    | 16    | 16    | 16    | 16    | 17    | 13.33                 |
| STATE<br>TOTAL | 3,519 | 3,558 | 3,636 | 3,705 | 3,793 | 3,840 | 3,893 | 3,950 | 4,055 | 4,176 | 18.67%                |

Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Licensing Board for the Healing Arts, May 1, 1962; May 1, 1963; May 1, 1964; May 1, 1965; May 1, 1966; May 1, 1967; May 1, 1968; May 1, 1969; May 1, 1970.

TABLE 5  
DISTRIBUTION OF PHYSICIANS IN TENNESSEE BY GEOGRAPHICAL REGION, 1961-1970

| State Regions                                     | 1961  | 1962  | 1963  | 1964  | 1965  | 1966  | 1967  | 1968  | 1969  | 1970  | % Increase<br>1961-1970 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|
| <i>West Tennessee</i>                             |       |       |       |       |       |       |       |       |       |       |                         |
| Shelby County                                     | 949   | 968   | 999   | 1,037 | 1,071 | 1,083 | 1,143 | 1,170 | 1,201 | 1,212 | 27.84%                  |
| Madison County                                    | 63    | 61    | 64    | 64    | 67    | 67    | 70    | 72    | 73    | 77    | 22.22                   |
| Other Counties                                    | 224   | 215   | 219   | 207   | 218   | 217   | 212   | 216   | 215   | 207   | ( 7.58)                 |
| Total   | 1,235 | 1,244 | 1,282 | 1,308 | 1,356 | 1,367 | 1,425 | 1,458 | 1,489 | 1,496 | 21.13%                  |
| <i>Middle Tennessee</i>                           |       |       |       |       |       |       |       |       |       |       |                         |
| Davidson County                                   | 638   | 646   | 661   | 696   | 692   | 729   | 736   | 749   | 774   | 835   | 30.87%                  |
| Other Counties                                    | 381   | 391   | 387   | 394   | 416   | 406   | 405   | 407   | 404   | 409   | 7.34                    |
| Total   | 1,019 | 1,037 | 1,048 | 1,090 | 1,108 | 1,135 | 1,141 | 1,156 | 1,178 | 1,244 | 22.08%                  |
| <i>East Tennessee</i>                             |       |       |       |       |       |       |       |       |       |       |                         |
| Hamilton County                                   | 303   | 303   | 312   | 313   | 317   | 319   | 326   | 330   | 332   | 350   | 15.51%                  |
| Knox County                                       | 349   | 356   | 370   | 368   | 382   | 384   | 377   | 382   | 404   | 410   | 17.81                   |
| Other Counties                                    | 332   | 333   | 326   | 327   | 336   | 343   | 338   | 332   | 336   | 346   | 4.21                    |
| Total   | 983   | 992   | 1,008 | 1,008 | 1,035 | 1,046 | 1,041 | 1,044 | 1,072 | 1,106 | 12.51%                  |
| <i>Upper East Tennessee</i>                       |       |       |       |       |       |       |       |       |       |       |                         |
| Sullivan County                                   | 132   | 140   | 142   | 142   | 144   | 143   | 140   | 145   | 160   | 174   | 31.81%                  |
| Washington County                                 | 82    | 83    | 88    | 89    | 87    | 87    | 86    | 86    | 91    | 92    | 12.19                   |
| Other Counties                                    | 68    | 62    | 68    | 68    | 63    | 62    | 60    | 61    | 65    | 64    | ( 5.88)                 |
| Total   | 282   | 285   | 298   | 299   | 294   | 292   | 286   | 292   | 316   | 330   | 17.02%                  |
| GRAND TOTAL                                       | 3,519 | 3,558 | 3,636 | 3,705 | 3,793 | 3,840 | 3,893 | 3,950 | 4,055 | 4,176 | 18.67%                  |
| No. of MDs per 100,000<br>Population in Tennessee | 97    | 96    | 97    | 97    | 99    | 99    | 99    | 99    | 104   | 107   | 10.30%                  |

Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Licensing Board for the Healing Arts, May 1, 1962; May 1, 1963; May 1, 1964; May 1, 1965; May 1, 1966; May 1, 1967; May 1, 1968; May 1, 1969; May 1, 1970.

TABLE 6  
PHYSICIANS REGISTERED IN TENNESSEE, 1970

| Location                    | General<br>Practice | Specialists | Other* | Ratios of MD's<br>Per 100,000 <sup>100</sup> |            |
|-----------------------------|---------------------|-------------|--------|--|------------|
|                             |                     |             |        | Total<br>Physicians                          | Population |
| <i>West Tennessee</i>       |                     |             |        |  |            |
| Shelby County               | 166                 | 802         | 244    | 1,212  | 166        |
| Madison County              | 9                   | 64          | 4      | 77   | 119        |
| Other Counties              | 144                 | 57          | 6      | 207  | 52         |
| Total                       | 319                 | 923         | 254    | 1,496  | 126        |
| <i>Middle Tennessee</i>     |                     |             |        |  |            |
| Davidson County             | 76                  | 644         | 115    | 835  | 185        |
| Other Counties              | 250                 | 146         | 11     | 409  | 52         |
| Total                       | 326                 | 792         | 126    | 1,244  | 101        |
| <i>East Tennessee</i>       |                     |             |        |  |            |
| Hamilton County             | 62                  | 265         | 23     | 350  | 142        |
| Knox County                 | 91                  | 287         | 32     | 410  | 149        |
| Other Counties              | 186                 | 149         | 11     | 346  | 59         |
| Total                       | 339                 | 701         | 66     | 1,106  | 100        |
| <i>Upper East Tennessee</i> |                     |             |        |  |            |
| Sullivan County             | 41                  | 129         | 4      | 174  | 138        |
| Washington County           | 16                  | 73          | 3      | 92   | 126        |
| Other Counties              | 49                  | 14          | 1      | 64   | 41         |
| Total                       | 106                 | 216         | 8      | 330  | 93         |
| STATE TOTAL                 | 1,090               | 2,632       | 454    | 4,176  | 107        |

\*Includes Interns, Residents, and those not in practice. Teachers who are GP's are included under GP's; teachers who are specialists are included under specialists.

Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

TABLE 7  
PERCENTAGE INCREASE IN THE NUMBER OF REGISTERED  
PHYSICIANS IN TENNESSEE, 1961 TO 1970

| Location                    | General<br>Practice | Specialists | Other*  | Total<br>Physicians | MD's per<br>100,000<br>Population |
|-----------------------------|---------------------|-------------|---------|---------------------|-----------------------------------|
| <i>West Tennessee</i>       |                     |             |         |                     |                                   |
| Shelby County               | (13.98)%            | 41.19%      | 30.48%  | 27.84%              | 12.92%                            |
| Madison County              | (25.00)             | 68.00       | 300.00  | 22.22               | 14.42                             |
| Other Counties              | (18.64)             | 39.02       | 0.00    | ( 7.58)             | ( 7.14)                           |
| TOTAL                       | (16.49)%            | 40.06%      | 30.92%  | 21.13%              | 13.51%                            |
| <i>Middle Tennessee</i>     |                     |             |         |                     |                                   |
| Davidson County             | (11.62)%            | 44.07%      | 9.52%   | 30.87%              | 17.08%                            |
| Other Counties              | (14.08)             | 80.48       | 37.50   | 7.34                | ( 1.88)                           |
| TOTAL                       | (13.52)%            | 49.71%      | 11.50%  | 22.08%              | 10.98%                            |
| <i>East Tennessee</i>       |                     |             |         |                     |                                   |
| Hamilton County             | (22.50)%            | 28.64%      | 35.29%  | 15.51%              | 15.44%                            |
| Knox County                 | ( 4.21)             | 31.65       | ( 8.57) | 17.81               | 7.19                              |
| Other Counties              | (17.33)             | 53.60       | 10.00   | 4.21                | 1.72                              |
| TOTAL                       | (15.25)%            | 34.54%      | 6.45%   | 12.51%              | 8.69%                             |
| <i>Upper East Tennessee</i> |                     |             |         |                     |                                   |
| Sullivan County             | 13.88%              | 38.70%      | 33.33%  | 31.81%              | 23.21%                            |
| Washington County           | (30.43)             | 25.86       | 200.00  | 12.19               | 1.61                              |
| Other Counties              | ( 7.54)             | 0.00        | 0.00    | ( 5.88)             | (10.86)                           |
| TOTAL                       | ( 5.35)%            | 30.90%      | 60.00%  | 17.02%              | 9.41%                             |
| STATE TOTAL                 | (14.24)%            | 40.44%      | 21.39%  | 18.67%              | 10.30%                            |

\* Includes Interns, Residents, and those not in practice.

Those percentages which are in parenthesis indicate a decrease from 1961 to 1970.

Source: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1970.

TABLE 8  
NUMBER OF PHYSICIANS, HOSPITAL BEDS, POPULATION,  
AND PER CAPITA PERSONAL INCOME IN  
TENNESSEE COUNTIES, 1968

| <i>Counties</i> | <i>No. of Physicians<br/>in County<br/>(1968)</i> | <i>No. of Hospital<br/>Beds in County<br/>(1968)</i> | <i>1968<br/>Population<br/>of County</i> | <i>Per Capita<br/>Income<br/>1968</i> |
|-----------------|---|--|--|---------------------------------------|
| Anderson        | 68  | 281  | 62,443                                   | d/                                    |
| Bedford         | 16  | 97   | 25,621                                   | 2,590                                 |
| Benton          | 7   | 60   | 12,008                                   | 1,604                                 |
| Bledsoe         | 2   | 14   | 8,295                                    | 989                                   |
| Blount          | 46  | 210  | 62,324                                   | d/                                    |
| Bradley         | 31  | 182  | 47,501                                   | 2,386                                 |
| Campbell        | 10  | 105  | 27,366                                   | 1,573                                 |
| Cannon          | 3   | 91   | 8,310                                    | 1,473                                 |
| Carroll         | 10  | 76   | 25,574                                   | 1,802                                 |
| Carter          | 18  | 110  | 43,148                                   | 1,908                                 |
| Cheatham        | 2   | 0  | 12,394                                   | 1,732                                 |
| Chester         | 3   | 6  | 10,357                                   | 1,550                                 |
| Claiborne       | 6   | 61   | 18,782                                   | 1,428                                 |
| Clay            | 3   | 16   | 7,512                                    | 1,099                                 |
| Cocke           | 6   | 66   | 26,692                                   | 1,550                                 |
| Coffee          | 20  | 149  | 34,830                                   | 2,766                                 |
| Crockett        | 6   | 0  | 14,789                                   | 1,793                                 |
| Cumberland      | 16  | 82   | 21,493                                   | 1,596                                 |
| Davidson        | 749   | 6,547  | 447,143                                  | 3,274a/                               |
| Decatur         | 5   | 37   | 9,268                                    | 2,408                                 |
| Dekalb          | 4   | 45   | 11,240                                   | 1,758                                 |
| Dickson         | 12  | 131  | 22,781                                   | 1,942                                 |
| Dyer            | 25  | 162  | 30,630                                   | 2,478                                 |
| Fayette         | 7   | 27   | 25,685                                   | 1,322                                 |
| Fentress        | 6   | 70   | 14,335                                   | 1,085                                 |
| Franklin        | 12  | 162  | 28,205                                   | 1,783                                 |
| Gibson          | 27  | 222  | 50,751                                   | 3,069                                 |
| Giles           | 11  | 56   | 23,314                                   | 2,054                                 |
| Grainger        | 2   | 0  | 13,360                                   | 941                                   |
| Greene          | 24  | 231  | 48,360                                   | 1,912                                 |
| Grundy          | 1   | 26   | 11,466                                   | 1,277                                 |
| Hamblen         | 21  | 147  | 39,690                                   | 2,665                                 |
| Hamilton        | 330   | 1,566  | 256,381                                  | 3,046b/                               |
| Hancock         | 1   | 16   | 7,756                                    | 1,021                                 |
| Hardeman        | 10  | 2,656  | 24,992                                   | 1,640                                 |
| Hardin          | 10  | 51   | 19,787                                   | 1,691                                 |
| Hawkins         | 11  | 68   | 33,674                                   | 2,245                                 |
| Haywood         | 9   | 50   | 23,237                                   | 1,641                                 |
| Henderson       | 6   | 49   | 17,431                                   | 1,895                                 |
| Henry           | 16  | 125  | 23,361                                   | 2,393                                 |

NUMBER OF PHYSICIANS, HOSPITAL BEDS, POPULATION,  
AND PER CAPITA PERSONAL INCOME IN  
TENNESSEE COUNTIES, 1968 (continued)

| <i>Counties</i> | <i>No. of Physicians<br/>in County<br/>(1968)</i> | <i>No. of Hospital<br/>Beds in County<br/>(1968)</i> | <i>1968<br/>Population<br/>of County</i> | <i>Per Capita<br/>Income<br/>1968</i> |
|-----------------|---|--|--|---------------------------------------|
| Hickman         | 4   | 36   | 12,044                                   | 1,643                                 |
| Houston         | 2   | 0  | 5,880                                    | 1,721                                 |
| Humphreys       | 8   | 24   | 11,938                                   | 3,06b                                 |
| Jackson         | 5   | 40   | 8,653                                    | 1,540                                 |
| Jefferson       | 12  | 103  | 25,886                                   | 1,960                                 |
| Johnson         | 3   | 0  | 11,550                                   | 1,397                                 |
| Knox            | 382   | 4,481  | 267,661                                  | 2,877c/                               |
| Lake            | 3   | 0  | 10,026                                   | 1,492                                 |
| Lauderdale      | 10  | 64   | 23,417                                   | 1,720                                 |
| Lawrence        | 12  | 123  | 30,411                                   | 2,027                                 |
| Lewis           | 1   | 32   | 6,657                                    | 2,187                                 |
| Lincoln         | 16  | 150  | 26,107                                   | 1,878                                 |
| Loudon          | 9   | 47   | 24,594                                   | 1,996                                 |
| McMinn          | 24  | 105  | 35,730                                   | 2,606                                 |
| McNairy         | 6   | 49   | 17,750                                   | 1,632                                 |
| Macon           | 5   | 33   | 12,405                                   | 1,553                                 |
| Madison         | 72  | 400  | 64,714                                   | 2,419                                 |
| Marion          | 10  | 72   | 21,638                                   | 1,844                                 |
| Marshall        | 14  | 159  | 18,222                                   | 2,278                                 |
| Maury           | 30  | 175  | 46,185                                   | 2,437                                 |
| Meigs           | 2   | 0  | 5,074                                    | 1,451                                 |
| Monroe          | 12  | 89   | 24,308                                   | 1,602                                 |
| Montgomery      | 40  | 198  | 69,684                                   | 2,466                                 |
| Moore           | 1   | 0  | 3,594                                    | 2,173                                 |
| Morgan          | 2   | 0  | 14,464                                   | 1,214                                 |
| Obion           | 28  | 269  | 29,744                                   | 2,530                                 |
| Overton         | 5   | 55   | 15,282                                   | 1,347                                 |
| Perry           | 2   | 24   | 5,197                                    | 1,955                                 |
| Pickett         | 0   | 0  | 4,195                                    | 1,548                                 |
| Polk            | 5   | 40   | 12,967                                   | 1,938                                 |
| Putnam          | 20  | 97   | 32,911                                   | 2,005                                 |
| Rhea            | 8   | 45   | 17,017                                   | 2,020                                 |
| Roane           | 21  | 149  | 38,829                                   | 1,873                                 |
| Robertson       | 14  | 92   | 30,461                                   | 1,631                                 |
| Rutherford      | 54  | 1,539  | 63,681                                   | 2,020                                 |
| Scott           | 6   | 60   | 16,182                                   | 1,311                                 |
| Sequatchie      | 2   | 26   | 6,699                                    | 1,331                                 |
| Sevier          | 10  | 44   | 22,202                                   | 2,167                                 |
| Shelby          | 1,170   | 6,392  | 734,542                                  | 2,991                                 |
| Smith           | 7   | 69   | 11,974                                   | 1,600                                 |
| Stewart         | 3   | 0  | 7,476                                    | 1,984                                 |
| Sullivan        | 145   | 747  | 129,046                                  | 3,144                                 |



NUMBER OF PHYSICIANS, HOSPITAL BEDS, POPULATION,  
AND PER CAPITA PERSONAL INCOME IN  
TENNESSEE COUNTIES, 1968 (continued)

| <i>Counties</i> | <i>No. of Physicians<br/>in County<br/>(1968)</i> | <i>No. of Hospital<br/>Beds in County<br/>(1968)</i> | <i>1968<br/>Population<br/>of County</i> | <i>Per Capita<br/>Income<br/>1968</i> |
|-----------------|---|--|--|---------------------------------------|
| Sumner          | 18  | 108  | 54,154                                   | c/                                    |
| Tipton          | 12  | 59   | 30,293                                   | 1,560                                 |
| Trousdale       | 2   | 23   | 5,149                                    | 2,479                                 |
| Unicoi          | 4   | 48   | 15,627                                   | 2,218                                 |
| Union           | 1   | 0  | 9,741                                    | 762                                   |
| Van Buren       | 1   | 0  | 3,563                                    | 1,852                                 |
| Warren          | 12  | 112  | 26,031                                   | 2,340                                 |
| Washington      | 86  | 992  | 69,854                                   | 2,257                                 |
| Wayne           | 3   | 33   | 12,970                                   | 1,713                                 |
| Weakley         | 16  | 92   | 26,107                                   | 2,068                                 |
| White           | 7   | 57   | 16,244                                   | 2,073                                 |
| Williamson      | 14  | 78   | 30,859                                   | 1,917                                 |
| Wilson          | 16  | 72   | 38,269                                   | e/                                    |
| STATE TOTAL     | 3,950   | 31,752   | 3,975,000                                | —                                     |

a/ Includes Davidson, Sumner, and Wilson Counties

b/ Includes Walker County, Georgia

c/ Includes Knox, Anderson, and Blount Counties

d/ Included in Knox County

e/ Included in Davidson County

Sources: *Directory of Doctors of Medicine Registered in Tennessee*, State Board for  
the Healing Arts, May 1, 1968

1968 *Directory of Hospitals*

Tennessee Survey of Business, Vol. 6, No. 1, September, 1970, p. 6

TABLE 9  
PHYSICIANS PRACTICING IN TENNESSEE BY AREA OF SPECIALIZATION AND BOARD CERTIFICATION

| Regions in State            | General Practice |           | Medical Specialties |           | Surgical Specialties |           | Other Specialties |           | Specialty Unknown |           | Total Physicians |         |
|-----------------------------|------------------|-----------|---------------------|-----------|----------------------|-----------|-------------------|-----------|-------------------|-----------|------------------|---------|
|                             | Total No.        | No. Cert. | Total No.           | No. Cert. | Total No.            | No. Cert. | Total No.         | No. Cert. | Total No.         | No. Cert. | Total No.        | % Cert. |
| <i>West Tennessee</i>       |                  |           |                     |           |                      |           |                   |           |                   |           |                  |         |
| Shelby County               | 158              | 3         | 395                 | 170       | 537                  | 269       | 258               | 112       | 151               | 1,499     | 554              | 37.0%   |
| Madison County              | 11               | 0         | 20                  | 14        | 30                   | 22        | 13                | 7         | 5                 | 79        | 43               | 54.4    |
| Other Counties              | 123              | 0         | 23                  | 2         | 37                   | 18        | 21                | 6         | 11                | 215       | 26               | 12.1    |
| Total                       | 292              | 3         | 438                 | 186       | 604                  | 309       | 292               | 125       | 167               | 1,793     | 623              | 34.7%   |
| <i>Middle Tennessee</i>     |                  |           |                     |           |                      |           |                   |           |                   |           |                  |         |
| Davidson County             | 71               | 3         | 345                 | 140       | 416                  | 179       | 220               | 101       | 95                | 1,147     | 423              | 36.9%   |
| Other Counties              | 221              | 0         | 48                  | 13        | 89                   | 31        | 49                | 26        | 29                | 435       | 73               | 16.8    |
| Total                       | 292              | 3         | 393                 | 153       | 505                  | 210       | 269               | 127       | 124               | 1,582     | 496              | 31.4%   |
| <i>East Tennessee</i>       |                  |           |                     |           |                      |           |                   |           |                   |           |                  |         |
| Knox County                 | 87               | 0         | 84                  | 51        | 142                  | 87        | 88                | 50        | 34                | 435       | 188              | 43.2%   |
| Hamilton County             | 54               | 1         | 75                  | 39        | 169                  | 85        | 71                | 36        | 18                | 387       | 165              | 42.6    |
| Other Counties              | 173              | 1         | 40                  | 19        | 78                   | 44        | 50                | 24        | 19                | 360       | 88               | 24.4    |
| Total                       | 314              | 2         | 199                 | 109       | 389                  | 220       | 209               | 110       | 71                | 1,182     | 441              | 37.3%   |
| <i>Upper East Tennessee</i> |                  |           |                     |           |                      |           |                   |           |                   |           |                  |         |
| Sullivan County             | 32               | 1         | 40                  | 18        | 57                   | 38        | 32                | 22        | 5                 | 166       | 79               | 47.6%   |
| Washington County           | 22               | 0         | 25                  | 17        | 43                   | 35        | 19                | 13        | 10                | 119       | 65               | 54.6    |
| Other Counties              | 46               | 0         | 2                   | 1         | 6                    | 4         | 8                 | 5         | 2                 | 64        | 10               | 15.6    |
| Total                       | 100              | 1         | 67                  | 36        | 106                  | 77        | 59                | 40        | 17                | 349       | 154              | 44.1%   |
| STATE TOTAL                 | 998              | 9         | 1,097               | 484       | 1,604                | 816       | 829               | 406       | 378               | 4,906     | 1,715            | 35.0%   |

Source: American Medical Association Physicians Record Tape, 1970

TABLE 10  
NEW MEDICAL LICENSES ISSUED, 1961 AND 1968

| <i>States</i>       | <i>1961</i> | <i>1968</i> | <i>% Change<br/>1968 Over 1961</i> |
|---------------------|-------------|-------------|------------------------------------|
| United States       | 8,023       | 9,766       | 21.72%                             |
| Southeastern States | 1,834       | 1,813       | (1.14)                             |
| Alabama             | 66          | 69          | 4.54                               |
| Arkansas            | 80          | 81          | 1.25                               |
| Florida             | 200         | 167         | (15.50)                            |
| Georgia             | 204         | 229         | 12.25                              |
| Kentucky            | 94          | 206         | 119.14                             |
| Louisiana           | 218         | 241         | 10.55                              |
| Mississippi         | 108         | 126         | 16.66                              |
| North Carolina      | 194         | 187         | (3.60)                             |
| South Carolina      | 70          | 70          | 0.00                               |
| Tennessee           | 202         | 133         | (34.15)                            |
| Virginia            | 367         | 267         | (27.24)                            |
| West Virginia       | 31          | 37          | 19.35                              |

Source: *Journal of the American Medical Association*, Vol. 180, No. 10, June 9, 1962, Vol. 208, No. 11, June 16, 1969.

TABLE 11  
AGE DISTRIBUTION OF PHYSICIANS IN 1967

|                     | Total<br>Physicians | Under<br>30 | 30-34  | 35-39  | 40-44  | 45-49  | 50-54  | 55-59  | 60-64  | 65-69  | 70-74 | 75 and<br>Over | Median<br>Age<br>Interval |
|---------------------|---------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|----------------|---------------------------|
| United States       | 306,970             | 34,615      | 42,399 | 41,179 | 40,395 | 35,302 | 29,151 | 26,510 | 20,557 | 14,361 | 5,720 | 12,781         | 40-44                     |
| Southeastern States | 50,638              | 5,127       | 7,193  | 7,099  | 7,208  | 6,258  | 4,697  | 3,854  | 2,944  | 2,155  | 1,485 | 2,618          | 40-44                     |
| Alabama             | 3,175               | 293         | 431    | 442    | 454    | 406    | 331    | 263    | 181    | 123    | 85    | 166            | 40-44                     |
| Arkansas            | 1,871               | 146         | 246    | 269    | 275    | 250    | 184    | 139    | 123    | 75     | 46    | 118            | 40-44                     |
| Florida             | 9,716               | 730         | 1,158  | 1,394  | 1,377  | 1,141  | 835    | 705    | 607    | 541    | 507   | 721            | 45-49                     |
| Georgia             | 5,101               | 590         | 840    | 741    | 737    | 656    | 439    | 356    | 239    | 180    | 91    | 232            | 40-44                     |
| Kentucky            | 3,422               | 283         | 517    | 487    | 478    | 443    | 325    | 237    | 204    | 161    | 75    | 162            | 40-44                     |
| Louisiana           | 4,507               | 643         | 708    | 645    | 624    | 521    | 443    | 318    | 221    | 130    | 91    | 163            | 40-44                     |
| Mississippi         | 1,997               | 162         | 295    | 280    | 288    | 278    | 170    | 150    | 124    | 72     | 41    | 137            | 40-44                     |
| North Carolina      | 5,565               | 573         | 827    | 793    | 783    | 707    | 517    | 389    | 359    | 248    | 147   | 222            | 40-44                     |
| South Carolina      | 2,473               | 251         | 386    | 349    | 346    | 311    | 246    | 172    | 136    | 101    | 57    | 118            | 40-44                     |
| Tennessee           | 4,787               | 588         | 692    | 634    | 712    | 593    | 474    | 350    | 240    | 176    | 120   | 208            | 40-44                     |
| Virginia            | 6,144               | 739         | 922    | 863    | 885    | 722    | 508    | 517    | 356    | 231    | 153   | 248            | 40-44                     |
| West Virginia       | 1,880               | 129         | 171    | 202    | 249    | 230    | 225    | 208    | 154    | 117    | 72    | 123            | 45-49                     |

Source: C. N. Theodore and J. N. Haug, *Selected Characteristics of the Physician Population, 1963 and 1967*. Chicago: American Medical Association, 1968.

TABLE 12  
PROJECTED NUMBER OF ACTIVE PHYSICIANS IN TENNESSEE AND  
THE NUMBER WHICH MUST BE REPLACED DUE TO  
DEATH TO 1980

| <i>Year</i>                              | <i>Active MDs<br/>in Tennessee</i> | <i>No. of MDs<br/>Per 100,000<br/>Population</i> | <i>MDs To Be<br/>Replaced Due<br/>To Death*</i> |
|--|------------------------------------|--|---|
| <i>Actual</i>                            |                                    |  |   |
| 1963                                     | 4,183                              | 113  | 88  |
| 1967                                     | 4,634                              | 119  | 81  |
| <i>Projected</i>                         |                                    |  |   |
| 1968                                     | 4,759                              |  | 95  |
| 1969                                     | 4,887                              |  | 98  |
| 1970                                     | 5,019                              | 128  | 100   |
| 1971                                     | 5,134                              |  | 118   |
| 1972                                     | 5,273                              |  | 122   |
| 1973                                     | 5,415                              |  | 125   |
| 1974                                     | 5,561                              |  | 128   |
| 1975                                     | 5,687                              | 131  | 131   |
| 1976                                     | 5,810                              |  | 134   |
| 1977                                     | 5,935                              |  | 137   |
| 1978                                     | 6,063                              |  | 139   |
| 1979                                     | 6,194                              |  | 142   |
| 1980                                     | 6,300                              | 138  | 145   |
| Net Increase in MDs in<br>1980 over 1967 | 1,666                              |  |   |
| Total MDs To Be<br>Replaced, 1970—1980   |                                    |  | 1,421   |

\* The number of active physicians (AMA Count) who die in Tennessee each year was not available. The figures show the number of deaths in 1963 and 1967-69 represent the number of *registered* physicians in Tennessee who died. These constitute approximately 2.3% of the registered physicians. It is thus assumed that 2.3% of active physicians will die each year. Projections of deaths among active physicians for the years 1970-80 are based on that 2.3% rate.

Source for Actual No. Active MDs in Tennessee:

C. N. Theodore and J. N. Haug, *Selected Characteristics of the Physician Population, 1963 and 1967*. Chicago: American Medical Association, 1968.

Source for Actual No. MDs Who Died 1963, 1967 through 1969:

*Directory of Doctors of Medicine Registered in Tennessee*, State Board for the Healing Arts, May 1, 1963, May 1, 1967, May 1, 1968, May 1, 1969, and May 1, 1970.

TABLE 13  
PHYSICIANS IN TENNESSEE WHO WERE BORN IN TENNESSEE

| <i>Regions</i>              | <i>Total No.<br/>of MDs</i> | <i>MDs Reporting<br/>Place of<br/>Birth</i> | <i>MDs Born<br/>in Tenn.</i> | <i>Col. 3 as<br/>% Col. 2</i> |
|-----------------------------|-----------------------------|---|------------------------------|-------------------------------|
| <i>West Tennessee</i>       |                             |   |                              |                               |
| Shelby County               | 1,499                       | 1,456                                       | 618                          | 42.2%                         |
| Madison County              | 79                          | 79  | 49                           | 62.0                          |
| Other Counties              | 215                         | 213   | 155                          | 72.8                          |
| Total                       | 1,793                       | 1,748                                       | 822                          | 47.0%                         |
| <i>Middle Tennessee</i>     |                             |   |                              |                               |
| Davidson County             | 1,147                       | 1,100                                       | 351                          | 31.9%                         |
| Other Counties              | 435                         | 421   | 265                          | 62.9%                         |
| Total                       | 1,582                       | 1,521                                       | 616                          | 40.5%                         |
| <i>East Tennessee</i>       |                             |   |                              |                               |
| Knox County                 | 435                         | 423   | 227                          | 53.7%                         |
| Hamilton County             | 387                         | 374   | 132                          | 35.3                          |
| Other Counties              | 360                         | 353   | 188                          | 53.3                          |
| Total                       | 1,182                       | 1,150                                       | 547                          | 47.6%                         |
| <i>Upper East Tennessee</i> |                             |   |                              |                               |
| Sullivan County             | 166                         | 166   | 54                           | 32.5%                         |
| Washington County           | 119                         | 113   | 41                           | 36.3                          |
| Other Counties              | 64                          | 63  | 36                           | 57.1                          |
| Total                       | 349                         | 342   | 131                          | 38.3%                         |
| STATE TOTAL                 | 4,906                       | 4,761                                       | 2,116                        | 44.4%                         |

Source: American Medical Association Physicians Record Tape, 1970.

TABLE 14

## PHYSICIANS IN TENNESSEE WHO GRADUATED FROM A TENNESSEE MEDICAL SCHOOL

| Regions of State            | Total No. of MDs |   | Grads of UT |       | Grads of VU |       | Grads of MMC |      | Grads of Extinct Tenn. School |      | Total Tenn. Grads |       |
|-----------------------------|------------------|---|-------------|-------|-------------|-------|--------------|------|-------------------------------|------|-------------------|-------|
|                             | No.              | % | No.         | %     | No.         | %     | No.          | %    | No.                           | %    | No.               | %     |
| <i>West Tennessee</i>       |                  |   |             |       |             |       |              |      |                               |      |                   |       |
| Shelby County               | 1,499            |   | 874         | 58.3% | 31          | 2.0%  | 21           | 1.4% | 15                            | 1.0% | 941               | 62.7% |
| Madison County              | 79               |   | 37          | 46.8  | 20          | 25.3  | 1            | 1.2  | 0                             | 0.0  | 58                | 73.4  |
| Other Counties              | 215              |   | 158         | 73.5  | 17          | 7.9   | 2            | 0.0  | 3                             | 1.4  | 180               | 83.7  |
| Total                       | 1,793            |   | 1,069       | 59.6% | 68          | 3.8%  | 24           | 1.3% | 18                            | 1.0% | 1,179             | 65.8% |
| <i>Middle Tennessee</i>     |                  |   |             |       |             |       |              |      |                               |      |                   |       |
| Davidson County             | 1,147            |   | 154         | 13.4% | 375         | 32.6% | 99           | 8.6% | 4                             | 0.3% | 632               | 55.1% |
| Other Counties              | 435              |   | 226         | 52.0  | 64          | 14.7  | 8            | 1.8  | 4                             | 0.9  | 302               | 69.4  |
| Total                       | 1,582            |   | 380         | 24.0% | 439         | 27.7% | 107          | 6.8% | 8                             | 0.5% | 934               | 59.0% |
| <i>East Tennessee</i>       |                  |   |             |       |             |       |              |      |                               |      |                   |       |
| Knox County                 | 435              |   | 251         | 57.7% | 21          | 4.8%  | 3            | 0.6% | 5                             | 1.1% | 280               | 64.3% |
| Hamilton County             | 387              |   | 107         | 27.6  | 33          | 8.5   | 5            | 1.2  | 1                             | 0.3  | 146               | 37.7  |
| Other Counties              | 360              |   | 194         | 53.9  | 21          | 5.8   | 2            | 0.6  | 5                             | 1.4  | 222               | 61.7  |
| Total                       | 1,182            |   | 552         | 46.7% | 75          | 6.3%  | 10           | 0.8% | 11                            | 0.9% | 648               | 54.8% |
| <i>Upper East Tennessee</i> |                  |   |             |       |             |       |              |      |                               |      |                   |       |
| Sullivan County             | 166              |   | 51          | 30.7% | 3           | 1.8%  | 0            | 0.0% | 1                             | 0.6% | 55                | 33.1% |
| Washington County           | 119              |   | 37          | 31.0  | 7           | 5.8   | 0            | 0.0  | 2                             | 1.7  | 46                | 38.6  |
| Other Counties              | 64               |   | 35          | 54.7  | 3           | 4.7   | 0            | 0.0  | 1                             | 1.6  | 39                | 60.9  |
| Total                       | 349              |   | 123         | 35.2% | 13          | 3.7%  | 0            | 0.0% | 4                             | 1.1% | 140               | 40.1% |
| STATE TOTAL                 | 4,906            |   | 2,124       | 43.2% | 615         | 12.5% | 141          | 2.8% | 41                            | 0.8% | 2,921             | 59.5% |

Source: American Medical Association Physicians Record Tape, 1970.



TABLE 15  
PHYSICIANS IN TENNESSEE WHO TOOK THEIR INTERNSHIP  
TRAINING IN TENNESSEE

| <i>Regions</i>              | <i>Total No.<br/>of MDs</i> | <i>No. MDs With<br/>Place of Intern.<br/>Reported</i> | <i>No. MDs<br/>Intern.<br/>in Tenn.</i> | <i>Col. 3 as<br/>% Col. 2</i> |
|-----------------------------|-----------------------------|---|---|-------------------------------|
| <i>West Tennessee</i>       |                             |   |   |                               |
| Shelby County               | 1,499                       | 1,353   | 704                                     | 52.0%                         |
| Madison County              | 79                          | 73  | 29                                      | 39.7                          |
| Other Counties              | 215                         | 189   | 103                                     | 54.5                          |
| Total                       | 1,793                       | 1,615   | 836                                     | 51.8%                         |
| <i>Middle Tennessee</i>     |                             |   |   |                               |
| Davidson County             | 1,147                       | 1,122   | 521                                     | 46.4%                         |
| Other Counties              | 435                         | 400   | 196                                     | 49.0                          |
| Total                       | 1,582                       | 1,522   | 717                                     | 47.1%                         |
| <i>East Tennessee</i>       |                             |   |   |                               |
| Knox County                 | 435                         | 414   | 193                                     | 46.6%                         |
| Hamilton County             | 387                         | 361   | 122                                     | 33.8                          |
| Other Counties              | 360                         | 326   | 147                                     | 45.1                          |
| Total                       | 1,182                       | 1,101   | 462                                     | 42.0%                         |
| <i>Upper East Tennessee</i> |                             |   |   |                               |
| Sullivan County             | 166                         | 154   | 34                                      | 22.1%                         |
| Washington County           | 119                         | 106   | 23                                      | 21.7                          |
| Other Counties              | 64                          | 54  | 29                                      | 53.7                          |
| Total                       | 349                         | 314   | 86                                      | 27.4%                         |
| STATE TOTAL                 | 4,906                       | 4,552   | 2,101                                   | 46.2%                         |

Source: American Medical Association Physicians Record Tape, 1970.

TABLE 16  
PHYSICIANS IN TENNESSEE WHO TOOK THEIR RESIDENCY  
TRAINING IN TENNESSEE

| <i>Regions of State</i>     | <i>Total No.<br/>of MDs</i> | <i>No. MDs With<br/>Place of Res.<br/>Reported</i> | <i>No. MDs<br/>With Tenn.<br/>Residency</i> | <i>Col. 3<br/>As %<br/>Col. 2</i> |
|-----------------------------|-----------------------------|--|---|-----------------------------------|
| <i>West Tennessee</i>       |                             |  |   |                                   |
| Shelby County               | 1,499                       | 1,072  | 659   | 61.5%                             |
| Madison County              | 79                          | 59   | 25  | 42.4                              |
| Other Counties              | 215                         | 85   | 44  | 51.8                              |
| Total                       | 1,793                       | 1,216  | 728   | 59.9%                             |
| <i>Middle Tennessee</i>     |                             |  |   |                                   |
| Davidson County             | 1,147                       | 880  | 556   | 63.2%                             |
| Other Counties              | 435                         | 219  | 118   | 53.9                              |
| Total                       | 1,582                       | 1,099  | 674   | 61.3%                             |
| <i>East Tennessee</i>       |                             |  |   |                                   |
| Knox County                 | 435                         | 303  | 134   | 44.2%                             |
| Hamilton County             | 387                         | 297  | 146   | 49.2                              |
| Other Counties              | 360                         | 191  | 84  | 44.0                              |
| Total                       | 1,182                       | 791  | 364   | 46.0%                             |
| <i>Upper East Tennessee</i> |                             |  |   |                                   |
| Sullivan County             | 116                         | 113  | 18  | 15.9%                             |
| Washington County           | 119                         | 80   | 12  | 15.0                              |
| Other Counties              | 64                          | 14   | 7   | 50.0                              |
| Total                       | 349                         | 207  | 37  | 17.9%                             |
| STATE TOTAL                 | 4,906                       | 3,313  | 1,803                                       | 54.4%                             |

Source: American Medical Association Physicians Record Tape, 1970.

TABLE 17

## ENROLLMENT IN MEDICAL COLLEGES OF THE SOUTHEAST

| <i>Institutions</i>                              | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Alabama: Medical School of Alabama               | 300     | 300     | 298     | 296     | 300     | 297     | 312     | 325     | 339     |
| Arkansas: University of Arkansas                 | 336     | 331     | 341     | 348     | 361     | 361     | 370     | 388     | 395     |
| Florida: University of Miami                     | 286     | 277     | 292     | 298     | 302     | 305     | 312     | 329     | 332     |
| University of Florida                            | 179     | 185     | 189     | 207     | 224     | 232     | 236     | 237     | 246     |
| Total  | 465     | 462     | 481     | 505     | 526     | 537     | 548     | 566     | 578     |
| Georgia: Emory University                        | 287     | 285     | 294     | 295     | 290     | 286     | 280     | 290     | 293     |
| Medical School of Georgia                        | 366     | 368     | 369     | 371     | 383     | 379     | 383     | 388     | 393     |
| Total  | 653     | 653     | 663     | 666     | 673     | 665     | 663     | 678     | 686     |
| Kentucky: University of Kentucky                 | 40      | 100     | 168     | 229     | 263     | 282     | 276     | 291     | 300     |
| University of Louisville                         | 359     | 344     | 340     | 341     | 344     | 353     | 363     | 370     | 367     |
| Total  | 399     | 444     | 508     | 570     | 607     | 645     | 639     | 661     | 667     |
| Louisiana: Louisiana State University            | 460     | 482     | 500     | 507     | 512     | 513     | 516     | 513     | 510     |
| Tulane University                                | 499     | 499     | 490     | 499     | 509     | 507     | 510     | 508     | 506     |
| Total  | 959     | 981     | 990     | 1,006   | 1,021   | 1,020   | 1,026   | 1,021   | 1,016   |
| Mississippi: University of Mississippi           | 274     | 282     | 289     | 285     | 286     | 289     | 298     | 306     | 319     |
| North Carolina: University of North Carolina     | 258     | 259     | 257     | 264     | 274     | 279     | 284     | 288     | 287     |
| Duke University                                  | 313     | 319     | 336     | 343     | 333     | 331     | 323     | 329     | 333     |
| Bowman Gray                                      | 215     | 211     | 204     | 198     | 206     | 210     | 214     | 224     | 226     |
| Total  | 786     | 789     | 797     | 805     | 813     | 820     | 821     | 841     | 846     |
| South Carolina: Medical School of South Carolina | 303     | 301     | 307     | 316     | 312     | 309     | 308     | 302     | 326     |
| Tennessee: University of Tennessee               | 759     | 751     | 730     | 740     | 713     | 688     | 672     | 695     | 738     |
| Vanderbilt University                            | 200     | 194     | 192     | 198     | 206     | 211     | 206     | 217     | 227     |
| Meharry Medical College                          | 263     | 263     | 255     | 240     | 229     | 226     | 234     | 251     | 278     |
| Total  | 1,222   | 1,208   | 1,177   | 1,178   | 1,148   | 1,125   | 1,112   | 1,163   | 1,243   |

ENROLLMENT IN MEDICAL COLLEGES OF THE SOUTHEAST (continued)

| <i>Institutions</i>                     | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Virginia: University of Virginia        | 292     | 272     | 288     | 292     | 295     | 295     | 295     | 302     | 319     |
| Medical College of Virginia             | 331     | 318     | 308     | 315     | 328     | 341     | 375     | 416     | 451     |
| Total                                   | 623     | 590     | 596     | 607     | 623     | 636     | 670     | 718     | 770     |
| West Virginia: West Virginia University | 109     | 160     | 206     | 219     | 238     | 237     | 231     | 247     | 250     |
| GRAND TOTAL                             | 6,429   | 6,501   | 6,653   | 6,801   | 6,908   | 6,941   | 6,998   | 7,216   | 7,435   |

Source: *Journal of the American Medical Association*, Vol. 178, No. 6, November 11, 1961; Vol. 182, No. 7, November 17, 1962; Vol. 186, No. 7, November 16, 1963; Vol. 190, No. 7, November 16, 1964; Vol. 194, No. 7, November 15, 1965; Vol. 198, No. 8, November 21, 1966; Vol. 212, No. 8, November 20, 1967; Vol. 206, No. 9, November 25, 1968; Vol. 210, No. 8, November 24, 1969.

Ala  
Ark  
Cal  
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Neb  
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Nor  
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TABLE 18  
ENROLLMENT IN APPROVED MEDICAL SCHOOLS  
OF THE UNITED STATES BY STATE, 1968-69

| <i>States</i>        | <i>1968-69<br/>Enrollment</i> | <i>Rank Order<br/>of State</i> |
|----------------------|-------------------------------|--------------------------------|
| Alabama              | 339                           | 29                             |
| Arkansas             | 395                           | 25                             |
| California           | 2,147                         | 4                              |
| Colorado             | 360                           | 26                             |
| Connecticut          | 347                           | 28                             |
| District of Columbia | 1,271                         | 9                              |
| Florida              | 578                           | 21                             |
| Georgia              | 686                           | 18                             |
| Illinois             | 2,306                         | 3                              |
| Indiana              | 857                           | 14                             |
| Iowa                 | 494                           | 22                             |
| Kansas               | 483                           | 23                             |
| Kentucky             | 667                           | 20                             |
| Louisiana            | 1,016                         | 12                             |
| Maryland             | 894                           | 13                             |
| Massachusetts        | 1,341                         | 7                              |
| Michigan             | 1,338                         | 8                              |
| Minnesota            | 685                           | 19                             |
| Mississippi          | 319                           | 32                             |
| Missouri             | 1,178                         | 11                             |
| Nebraska             | 667                           | 20                             |
| New Jersey           | 306                           | 33                             |
| New Mexico           | 97                            | 37                             |
| New York             | 4,431                         | 1                              |
| North Carolina       | 846                           | 15                             |
| Ohio                 | 1,392                         | 5                              |
| Oklahoma             | 418                           | 24                             |
| Oregon               | 351                           | 27                             |
| Pennsylvania         | 2,846                         | 2                              |
| South Carolina       | 326                           | 31                             |
| Tennessee            | 1,243                         | 10                             |
| Texas                | 1,368                         | 6                              |
| Utah                 | 259                           | 34                             |
| Vermont              | 232                           | 36                             |
| Virginia             | 770                           | 17                             |
| Washington           | 334                           | 30                             |
| West Virginia        | 250                           | 35                             |
| Wisconsin            | 815                           | 16                             |
| TOTAL                | 34,652                        | —                              |

Source: *Journal of the American Medical Association*, Vol. 210, No. 8, November 24, 1969.

TABLE 19  
RATIO OF ENTERING MEDICAL STUDENTS TO POPULATION, TO BACHELOR'S DEGREES AWARDED, AND PER CAPITA PERSONAL INCOME  
RANKING BY STATE, 1968-69

| States              | Entering Students<br>Per 100,000 |  | Rank       |        | Entering Students<br>Per 1,000 Bachelor's<br>Degrees Awarded |            | Rank   |   | Per Capita<br>Personal<br>Income |  | Rank       |        |
|---------------------|----------------------------------|--|------------|--------|--|------------|--------|---|----------------------------------|--|------------|--------|
|                     | Population                       |  | S E States | Nation |  | S E States | Nation |   |                                  |  | S E States | Nation |
| United States       | 4.9                              |  | —          | —      | 15.4   | —          | —      | — | \$3,223                          |  | —          | —      |
| Southeastern States | 4.4                              |  | —          | —      | 16.1   | —          | —      | — | 2,564                            |  | —          | —      |
| Alabama             | 3.3                              |  | 10         | 44     | 12.5   | 10         | 31     |   | 2,329                            |  | 10         | 49     |
| Arkansas            | 6.1                              |  | 1          | 6      | 22.0   | 1          | 5      |   | 2,304                            |  | 11         | 50     |
| Florida             | 4.0                              |  | 8          | 36     | 16.8   | 6          | 17     |   | 3,081                            |  | 1          | 29     |
| Georgia             | 4.2                              |  | 7          | 32     | 17.3   | 5          | 14     |   | 2,743                            |  | 2          | 40     |
| Kentucky            | 5.4                              |  | 3          | 13     | 17.9   | 3          | 10     |   | 2,597                            |  | 6          | 45     |
| Louisiana           | 5.0                              |  | 4          | 21     | 17.8   | 4          | 11     |   | 2,615                            |  | 4          | 43     |
| Mississippi         | 4.5                              |  | 5          | 24     | 15.5   | 8          | 21     |   | 2,057                            |  | 12         | 51     |
| North Carolina      | 2.6                              |  | 11         | 50     | 8.9  | 11         | 44     |   | 2,606                            |  | 5          | 44     |
| South Carolina      | 4.3                              |  | 6          | 31     | 18.1   | 2          | 9      |   | 2,339                            |  | 9          | 48     |
| Tennessee           | 5.5                              |  | 2          | 12     | 17.8   | 4          | 12     |   | 2,553                            |  | 7          | 46     |
| Virginia            | 3.9                              |  | 9          | 39     | 16.2   | 7          | 19     |   | 3,049                            |  | 3          | 30     |
| West Virginia       | 4.2                              |  | 7          | 33     | 12.9   | 9          | 30     |   | 2,491                            |  | 8          | 47     |

Source: *Journal of the American Medical Association*, November 24, 1969, Vol. 210, No. 8.



TABLE 20  
GRADUATES FROM SOUTHEASTERN MEDICAL SCHOOLS

| <i>Institutions</i>                              | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Alabama: Medical School of Alabama               | 76      | 67      | 76      | 67      | 67      | 68      | 74      | 71      | 82      |
| Arkansas: University of Arkansas                 | 82      | 74      | 77      | 74      | 80      | 79      | 87      | 84      | 91      |
| Florida: University of Miami                     | 69      | 60      | 63      | 67      | 73      | 69      | 69      | 77      | 75      |
| University of Florida                            | 41      | 42      | 40      | 44      | 43      | 55      | 59      | 55      | 57      |
| Total  | 110     | 102     | 103     | 111     | 116     | 124     | 128     | 132     | 132     |
| Georgia: Emory University                        | 69      | 63      | 70      | 70      | 71      | 72      | 64      | 66      | 64      |
| Medical School of Georgia                        | 84      | 80      | 88      | 85      | 91      | 91      | 92      | 93      | 89      |
| Total  | 153     | 143     | 158     | 155     | 162     | 163     | 156     | 159     | 153     |
| Kentucky: University of Kentucky                 | 0       | 0       | 0       | 32      | 46      | 68      | 60      | 58      | 70      |
| University of Louisville                         | 85      | 79      | 88      | 79      | 68      | 88      | 84      | 92      | 87      |
| Total  | 85      | 79      | 88      | 111     | 114     | 156     | 144     | 150     | 157     |
| Louisiana: Louisiana State University            | 101     | 102     | 112     | 111     | 118     | 118     | 125     | 115     | 121     |
| Tulane University                                | 115     | 129     | 119     | 109     | 126     | 118     | 128     | 122     | 121     |
| Total  | 216     | 231     | 231     | 220     | 244     | 236     | 253     | 237     | 242     |
| Mississippi: University of Mississippi           | 54      | 62      | 64      | 70      | 59      | 68      | 68      | 65      | 75      |
| North Carolina: University of North Carolina     | 60      | 62      | 59      | 58      | 63      | 65      | 74      | 68      | 67      |
| Duke University                                  | 81      | 77      | 81      | 84      | 85      | 81      | 80      | 83      | 76      |
| Bowman Gray                                      | 53      | 49      | 54      | 43      | 49      | 49      | 51      | 52      | 53      |
| Total  | 194     | 188     | 194     | 185     | 197     | 195     | 205     | 203     | 196     |
| South Carolina: Medical School of South Carolina | 72      | 68      | 70      | 74      | 80      | 68      | 80      | 66      | 72      |
| Tennessee: University of Tennessee               | 177     | 177     | 168     | 187     | 156     | 170     | 150     | 141     | 162     |
| Vanderbilt University                            | 51      | 50      | 43      | 43      | 47      | 53      | 48      | 50      | 47      |
| Meharry Medical College                          | 54      | 54      | 71      | 62      | 47      | 53      | 50      | 49      | 53      |
| Total  | 282     | 281     | 282     | 292     | 260     | 276     | 248     | 240     | 262     |
| Virginia: University of Virginia                 | 74      | 55      | 61      | 66      | 67      | 69      | 69      | 69      | 70      |
| Medical College of Virginia                      | 89      | 88      | 67      | 71      | 78      | 73      | 78      | 80      | 100     |
| Total  | 163     | 143     | 128     | 137     | 145     | 142     | 147     | 149     | 170     |
| West Virginia: West Virginia University          | 0       | 16      | 43      | 40      | 58      | 54      | 53      | 59      | 56      |
| GRAND TOTAL                                      | 1,487   | 1,454   | 1,514   | 1,466   | 1,582   | 1,629   | 1,643   | 1,615   | 1,688   |

Source: *Journal of the American Medical Association*, Vol. 178, No. 6, November 11, 1961; Vol. 182, No. 7, November 17, 1962; Vol. 186, No. 7, November 16, 1963; Vol. 190, No. 7, November 16, 1964; Vol. 194, No. 7, November 15, 1965; Vol. 198, No. 8, November 21, 1966; Vol. 202, No. 8, November 20, 1967; Vol. 206, No. 9, November 25, 1968; Vol. 210, No. 8, November 24, 1969.

TABLE 21  
GRADUATES OF MEDICAL SCHOOLS BY STATE WITH RANK ORDERS FOR PER CAPITA INCOME & POPULATION  
1968-69

| States               | Grads. of<br>Public Med.<br>Schools | Rank<br>Order | Total Grads<br>of all Med.<br>Schools in State | Rank<br>Order | % Public Grads<br>of Total Grads | Per Capita<br>Income | Rank<br>Order | Population<br>in 1,000's | Rank<br>Order |
|----------------------|-------------------------------------|---------------|--|---------------|----------------------------------|----------------------|---------------|--------------------------|---------------|
| Alabama              | 82                                  | 20            | 82   | 28            | 100%                             | \$2,329              | 49            | 3,533                    | 21            |
| Alaska               | 0                                   | 0             | 0  | 0             | 0                                | 4,124                | 4             | 271                      | 51            |
| Arizona              | 0                                   | 0             | 0  | 0             | 0                                | 2,983                | 33            | 1,637                    | 34            |
| Arkansas             | 91                                  | 16            | 91   | 25            | 100                              | 2,304                | 50            | 1,972                    | 32            |
| California           | 274                                 | 3             | 473  | 4             | 58                               | 4,012                | 5             | 18,992                   | 1             |
| Colorado             | 76                                  | 22            | 76   | 30            | 100                              | 3,371                | 21            | 3,012                    | 30            |
| Connecticut          | 0                                   | 0             | 77   | 29            | 0                                | 4,231                | 2             | 2,918                    | 24            |
| Delaware             | 0                                   | 0             | 0  | 0             | 0                                | 3,888                | 9             | 524                      | 47            |
| District of Columbia | 0                                   | 0             | 287  | 8             | 0                                | 4,516                | 1             | 808                      | 40            |
| Florida              | 57                                  | 28            | 132  | 21            | 43                               | 3,081                | 29            | 6,035                    | 9             |
| Georgia              | 89                                  | 17            | 153  | 18            | 58                               | 2,743                | 40            | 4,490                    | 15            |
| Hawaii               | 0                                   | 0             | 0  | 0             | 0                                | 3,514                | 15            | 760                      | 41            |
| Idaho                | 0                                   | 0             | 0  | 0             | 0                                | 2,728                | 41            | 701                      | 42            |
| Illinois             | 188                                 | 6             | 540  | 3             | 35                               | 3,994                | 6             | 10,887                   | 4             |
| Indiana              | 184                                 | 7             | 184  | 15            | 100                              | 3,421                | 17            | 5,012                    | 12            |
| Iowa                 | 123                                 | 11            | 123  | 22            | 100                              | 3,391                | 20            | 2,772                    | 25            |
| Kansas               | 112                                 | 13            | 112  | 23            | 100                              | 3,333                | 22            | 2,281                    | 29            |
| Kentucky             | 70                                  | 25            | 147  | 19            | 48                               | 2,597                | 45            | 3,201                    | 23            |
| Louisiana            | 121                                 | 12            | 242  | 11            | 50                               | 2,615                | 43            | 3,663                    | 19            |
| Maine                | 0                                   | 0             | 0  | 0             | 0                                | 2,857                | 37            | 982                      | 38            |
| Maryland             | 121                                 | 12            | 212  | 12            | 57                               | 3,712                | 11            | 3,680                    | 18            |
| Massachusetts        | 0                                   | 0             | 340  | 5             | 0                                | 3,796                | 10            | 5,434                    | 10            |
| Michigan             | 318                                 | 2             | 318  | 7             | 100                              | 3,674                | 13            | 8,608                    | 7             |
| Minnesota            | 159                                 | 10            | 159  | 17            | 100                              | 3,318                | 24            | 3,625                    | 20            |
| Mississippi          | 75                                  | 23            | 75   | 31            | 100                              | 2,057                | 51            | 2,344                    | 28            |
| Missouri             | 84                                  | 19            | 265  | 9             | 32                               | 3,220                | 26            | 4,587                    | 13            |

GRADUATES OF MEDICAL SCHOOLS BY STATE WITH RANK ORDERS FOR PER CAPITA INCOME & POPULATION  
1968-69 (continued)

| States         | Grads. of<br>Public Med.<br>Schools | Rank<br>Order | Total Grads<br>of all Med.<br>Schools in State | Rank<br>Order | % Public Grads<br>of Total Grads | Per Capita<br>Income | Rank<br>Order | Population<br>in 1,000s | Rank<br>Order |
|----------------|-------------------------------------|---------------|--|---------------|----------------------------------|----------------------|---------------|-------------------------|---------------|
| Montana        | 0                                   | 0             | 0  | 0             | 0                                | 2,917                | 34            | 699                     | 43            |
| Nebraska       | 80                                  | 21            | 146  | 20            | 55                               | 3,220                | 27            | 1,443                   | 35            |
| Nevada         | 0                                   | 0             | 0  | 0             | 0                                | 3,992                | 7             | 436                     | 48            |
| New Hampshire  | 0                                   | 0             | 0  | 0             | 0                                | 3,268                | 25            | 691                     | 44            |
| New Jersey     | 70                                  | 25            | 70   | 33            | 100                              | 3,907                | 8             | 6,981                   | 8             |
| New Mexico     | 15                                  | 31            | 15   | 37            | 100                              | 2,695                | 42            | 1,002                   | 37            |
| New York       | 375                                 | 1             | 1,042  | 1             | 36                               | 4,133                | 3             | 18,023                  | 2             |
| North Carolina | 67                                  | 26            | 196  | 13            | 34                               | 2,606                | 44            | 5,059                   | 11            |
| North Dakota   | 0                                   | 0             | 0  | 0             | 0                                | 2,808                | 39            | 632                     | 46            |
| Ohio           | 236                                 | 4             | 320  | 6             | 74                               | 3,487                | 16            | 10,487                  | 6             |
| Oklahoma       | 98                                  | 14            | 98   | 24            | 100                              | 2,860                | 36            | 2,516                   | 27            |
| Oregon         | 85                                  | 18            | 85   | 26            | 100                              | 3,325                | 23            | 1,981                   | 31            |
| Pennsylvania   | 0                                   | 0             | 671  | 2             | 0                                | 3,409                | 18            | 11,672                  | 3             |
| Rhode Island   | 0                                   | 0             | 0  | 0             | 0                                | 3,537                | 14            | 901                     | 39            |
| South Carolina | 72                                  | 24            | 72   | 32            | 100                              | 2,339                | 48            | 2,638                   | 26            |
| South Dakota   | 0                                   | 0             | 0  | 0             | 0                                | 2,916                | 35            | 668                     | 45            |
| Tennessee      | 162                                 | 9             | 262  | 10            | 62                               | 2,553                | 46            | 3,936                   | 17            |
| Texas          | 233                                 | 5             | 318  | 7             | 73                               | 3,016                | 32            | 10,858                  | 5             |
| Utah           | 63                                  | 27            | 63   | 34            | 100                              | 2,810                | 38            | 1,022                   | 36            |
| Vermont        | 48                                  | 30            | 48   | 36            | 100                              | 3,017                | 31            | 420                     | 49            |
| Virginia       | 170                                 | 8             | 170  | 16            | 100                              | 3,049                | 30            | 4,541                   | 14            |
| Washington     | 84                                  | 19            | 84   | 27            | 100                              | 3,676                | 12            | 3,208                   | 22            |
| West Virginia  | 56                                  | 29            | 56   | 35            | 100                              | 2,491                | 47            | 1,807                   | 33            |
| Wisconsin      | 94                                  | 15            | 188  | 14            | 50                               | 3,407                | 19            | 4,194                   | 16            |
| Wyoming        | 0                                   | 0             | 0  | 0             | 0                                | 3,139                | 28            | 319                     | 50            |
| TOTAL          | 4,232                               | —             | 7,992  | —             | 53%                              | \$3,223              | —             | 198,863                 | —             |

Source: *Journal of the American Medical Association*, November 24, 1969, Vol. 210, No. 8.

TABLE 22  
MEDICAL SCHOOL GRADUATES PER MILLION  
POPULATION, 1968-69

| <i>States</i>        | <i>Med. School<br/>Grads in<br/>1968-69</i> | <i>1969 Est.<br/>Population<br/>in 1,000s</i> | <i>Med. School<br/>Grads Per<br/>Million Pop.</i> | <i>Rank Order<br/>Column 3</i> |
|----------------------|---|---|---|--------------------------------|
| Alabama              | 82  | 3,533   | 23  | 25                             |
| Alaska               | 0   | 271   | 0   | 0                              |
| Arizona              | 0   | 1,637   | 0   | 0                              |
| Arkansas             | 91  | 1,972   | 46  | 12                             |
| California           | 473   | 18,992  | 25  | 24                             |
| Colorado             | 76  | 3,012   | 25  | 24                             |
| Connecticut          | 77  | 2,918   | 26  | 23                             |
| Delaware             | 0   | 524   | 0   | 0                              |
| District of Columbia | 287   | 808   | 355   | 1                              |
| Florida              | 132   | 6,035   | 22  | 26                             |
| Georgia              | 153   | 4,490   | 34  | 18                             |
| Hawaii               | 0   | 760   | 0   | 0                              |
| Idaho                | 0   | 701   | 0   | 0                              |
| Illinois             | 540   | 10,887  | 50  | 10                             |
| Indiana              | 184   | 5,012   | 37  | 17                             |
| Iowa                 | 123   | 2,772   | 44  | 14                             |
| Kansas               | 112   | 2,281   | 49  | 11                             |
| Kentucky             | 147   | 3,201   | 46  | 12                             |
| Louisiana            | 242   | 3,663   | 66  | 5                              |
| Maine                | 0   | 982   | 0   | 0                              |
| Maryland             | 212   | 3,680   | 58  | 8                              |
| Massachusetts        | 340   | 5,434   | 63  | 6                              |
| Michigan             | 318   | 8,608   | 37  | 17                             |
| Minnesota            | 159   | 3,625   | 44  | 14                             |
| Mississippi          | 75  | 2,344   | 32  | 19                             |
| Missouri             | 265   | 4,587   | 58  | 8                              |
| Montana              | 0   | 699   | 0   | 0                              |
| Nebraska             | 146   | 1,443   | 101   | 3                              |
| Nevada               | 0   | 436   | 0   | 0                              |
| New Hampshire        | 0   | 691   | 0   | 0                              |
| New Jersey           | 70  | 6,981   | 10  | 28                             |
| New Mexico           | 15  | 1,002   | 15  | 27                             |
| New York             | 1,042                                       | 18,023  | 58  | 8                              |
| North Carolina       | 196   | 5,059   | 39  | 16                             |
| North Dakota         | 0   | 632   | 0   | 0                              |
| Ohio                 | 320   | 10,487  | 31  | 20                             |
| Oklahoma             | 98  | 2,516   | 39  | 16                             |
| Oregon               | 85  | 1,921   | 43  | 15                             |
| Pennsylvania         | 671   | 11,672  | 57  | 9                              |
| Rhode Island         | 0   | 901   | 0   | 0                              |
| South Carolina       | 72  | 2,638   | 27  | 22                             |

MEDICAL SCHOOL GRADUATES PER MILLION  
POPULATION, 1968-69 (continued)

| <i>States</i> | <i>Med. School<br/>Grads in<br/>1968-69</i> | <i>1969 Est.<br/>Population<br/>in 1,000s</i> | <i>Med. School<br/>Grads Per<br/>Million Pop.</i> | <i>Rank Order<br/>Column 3</i> |
|---------------|---|---|---|--------------------------------|
| South Dakota  | 0   | 668   | 0   | 0                              |
| Tennessee     | 262   | 3,936   | 67  | 4                              |
| Texas         | 318   | 10,858  | 29  | 21                             |
| Utah          | 63  | 1,022   | 62  | 7                              |
| Vermont       | 48  | 420   | 114   | 2                              |
| Virginia      | 170   | 4,541   | 37  | 17                             |
| Washington    | 84  | 3,208   | 26  | 23                             |
| West Virginia | 56  | 1,807   | 31  | 20                             |
| Wisconsin     | 188   | 4,194   | 45  | 13                             |
| Wyoming       | 0   | 319   | 0   | 0                              |
| <b>TOTAL</b>  | <b>7,992</b>                                | <b>197,863</b>                                | <b>40</b>   | <b>—</b>                       |

Source: *Journal of the American Medical Association*, Vol. 210, No. 8, November 24, 1969.

TABLE 23

RATIO OF ENTERING MEDICAL STUDENTS TO POPULATION, TO BACHELOR'S DEGREES AWARDED, AND PER CAPITA PERSONAL INCOME RANKING BY STATE, 1968-69

| <i>States</i>        | <i>Ent. Students<br/>Per 100,000<br/>Population</i> | <i>in<br/>Rank<br/>Nation</i> | <i>Ent. Students<br/>Per 1,000<br/>Bachelor's<br/>Degrees</i> | <i>Rank<br/>in<br/>Nation</i> | <i>Per Capita<br/>Personal<br/>Income</i> | <i>Rank<br/>in<br/>Nation</i> |
|----------------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|
| Alabama              | 3.3   | 44                            | 12.5  | 31                            | \$2,329                                   | 49                            |
| Alaska               | 1.5   | 51                            | 19.6  | 7                             | 4,124                                     | 4                             |
| Arizona              | 4.3   | 27                            | 11.3  | 36                            | 2,983                                     | 33                            |
| Arkansas             | 6.1   | 6                             | 22.0  | 5                             | 2,304                                     | 50                            |
| California           | 3.4   | 42                            | 12.3  | 32                            | 4,012                                     | 5                             |
| Colorado             | 4.5   | 23                            | 10.0  | 41                            | 3,371                                     | 21                            |
| Connecticut          | 4.8   | 22                            | 17.2  | 15                            | 4,231                                     | 2                             |
| Delaware             | 3.4   | 43                            | 16.4  | 18                            | 3,888                                     | 9                             |
| District of Columbia | 5.0   | 19                            | 7.4   | 49                            | 4,516                                     | 1                             |
| Florida              | 4.0   | 36                            | 16.8  | 17                            | 3,081                                     | 29                            |
| Georgia              | 4.2   | 32                            | 17.3  | 14                            | 2,743                                     | 40                            |
| Hawaii               | 6.0   | 7                             | 22.6  | 4                             | 3,514                                     | 15                            |
| Idaho                | 4.3   | 28                            | 13.5  | 28                            | 2,728                                     | 41                            |
| Illinois             | 5.2   | 15                            | 19.0  | 8                             | 3,994                                     | 6                             |
| Indiana              | 5.1   | 18                            | 14.5  | 22                            | 3,421                                     | 17                            |
| Iowa                 | 5.0   | 20                            | 11.4  | 35                            | 3,391                                     | 20                            |
| Kansas               | 6.0   | 8                             | 14.2  | 23                            | 3,333                                     | 22                            |
| Kentucky             | 5.4   | 13                            | 17.9  | 10                            | 2,597                                     | 45                            |
| Louisiana            | 5.0   | 21                            | 17.8  | 11                            | 2,615                                     | 43                            |
| Maine                | 2.9   | 49                            | 8.1   | 47                            | 2,857                                     | 37                            |
| Maryland             | 6.3   | 5                             | 24.1  | 3                             | 3,712                                     | 11                            |
| Massachusetts        | 4.1   | 34                            | 8.8   | 45                            | 3,796                                     | 10                            |
| Michigan             | 4.3   | 29                            | 13.4  | 29                            | 3,674                                     | 13                            |
| Minnesota            | 5.4   | 14                            | 13.8  | 25                            | 3,318                                     | 24                            |
| Mississippi          | 4.5   | 24                            | 15.5  | 21                            | 2,057                                     | 51                            |
| Missouri             | 4.0   | 37                            | 12.2  | 33                            | 3,220                                     | 26                            |
| Montana              | 3.6   | 41                            | 8.3   | 46                            | 2,917                                     | 34                            |
| Nebraska             | 8.2   | 1                             | 17.1  | 16                            | 3,220                                     | 27                            |
| Nevada               | 3.7   | 40                            | 19.8  | 6                             | 3,992                                     | 7                             |
| New Hampshire        | 3.3   | 45                            | 6.7   | 51                            | 3,268                                     | 25                            |
| New Jersey           | 6.7   | 4                             | 28.7  | 1                             | 3,907                                     | 8                             |
| New Mexico           | 3.3   | 46                            | 11.0  | 39                            | 2,695                                     | 42                            |
| New York             | 8.1   | 2                             | 24.3  | 2                             | 4,133                                     | 3                             |
| North Carolina       | 2.6   | 50                            | 8.9   | 44                            | 2,606                                     | 44                            |
| North Dakota         | 8.1   | 3                             | 16.0  | 20                            | 2,808                                     | 39                            |
| Ohio                 | 4.3   | 30                            | 13.6  | 27                            | 3,487                                     | 16                            |
| Oklahoma             | 5.2   | 16                            | 13.8  | 26                            | 2,860                                     | 36                            |
| Oregon               | 4.5   | 25                            | 11.1  | 38                            | 3,325                                     | 23                            |
| Pennsylvania         | 5.8   | 9                             | 17.4  | 13                            | 3,409                                     | 18                            |
| Rhode Island         | 3.1   | 47                            | 7.1   | 50                            | 3,537                                     | 14                            |



RATIO OF ENTERING MEDICAL STUDENTS TO POPULATION, TO BACHELOR'S DEGREES AWARDED, AND PER CAPITA PERSONAL INCOME RANKING BY STATE, 1968-69 (continued)

| <i>States</i>  | <i>Ent. Students<br/>Per 100,000<br/>Population</i> | <i>in<br/>Rank<br/>Nation</i> | <i>Ent. Students<br/>Per 1,000<br/>Bachelor's<br/>Degrees</i> | <i>Rank<br/>in<br/>Nation</i> | <i>Per Capita<br/>Personal<br/>Income</i> | <i>Rank<br/>in<br/>Nation</i> |
|----------------|---|-------------------------------|---|-------------------------------|---|-------------------------------|
| South Carolina | 4.3   | 31                            | 18.1  | 9                             | 2,339                                     | 48                            |
| South Dakota   | 5.5   | 11                            | 10.2  | 40                            | 2,916                                     | 35                            |
| Tennessee      | 5.5   | 12                            | 17.8  | 12                            | 2,553                                     | 46                            |
| Texas          | 4.0   | 38                            | 14.0  | 24                            | 3,016                                     | 32                            |
| Utah           | 5.7   | 10                            | 7.8   | 48                            | 2,810                                     | 38                            |
| Vermont        | 5.2   | 17                            | 9.7   | 43                            | 3,017                                     | 31                            |
| Virginia       | 3.9   | 39                            | 16.2  | 19                            | 3,049                                     | 30                            |
| Washington     | 4.1   | 35                            | 11.3  | 37                            | 3,676                                     | 12                            |
| West Virginia  | 4.2   | 33                            | 12.9  | 30                            | 2,491                                     | 47                            |
| Wisconsin      | 4.5   | 26                            | 12.2  | 34                            | 3,407                                     | 19                            |
| Wyoming        | 3.1   | 48                            | 10.0  | 42                            | 3,139                                     | 28                            |
| TOTAL          | 4.9   | —                             | 15.4  | —                             | \$3,223                                   | —                             |

Source: *Journal of the American Medical Association*, Nov. 24, 1969, Vol. 210, No. 8.



TABLE 24  
APPLICATIONS TO TENNESSEE MEDICAL SCHOOLS BY  
TYPE OF ADMISSION ACTION, 1964-65  
THROUGH 1968-69

| <i>Admission Action</i>               | <i>1964-65</i> | <i>1965-66</i> | <i>1966-67</i> | <i>1967-68</i> | <i>1968-69</i> |
|---------------------------------------|----------------|----------------|----------------|----------------|----------------|
| <b>University of Tennessee</b>        |                |                |                |                |                |
| No. Enrolled                          | 181            | 176            | 186            | 198            | 192            |
| No. Not Accepted                      | 258            | 349            | 462            | 581            | 749            |
| No. Withdrew Before Action            | 44             | 41             | 36             | 5              | 0              |
| No. Withdrew After Acceptance         | 42             | 34             | 40             | 55             | 48             |
| Total Applications                    | 525            | 600            | 724            | 839            | 989            |
| Per Cent From Out-of-State:           |                |                |                |                |                |
| Enrolled                              | 23.75%         | 31.81%         | 28.49%         | 26.26%         | 20.83%         |
| Not Accepted                          | 67.05          | 77.65          | 85.06          | 87.95          | 85.31          |
| Withdrew Before Action                | 75.00          | 58.53          | 80.55          | 80.00          | 0.00           |
| Withdrew After Acceptance             | 57.14          | 35.29          | 50.00          | 50.90          | 45.83          |
| Total Applications                    | 52.00%         | 60.50%         | 68.37%         | 70.91%         | 70.87%         |
| Action Taken As % Total Applications: |                |                |                |                |                |
| Enrolled                              | 34.47%         | 29.33%         | 25.69%         | 23.59%         | 19.41%         |
| Not Accepted                          | 49.14          | 58.16          | 63.81          | 69.24          | 75.73          |
| Withdrew Before Action                | 8.38           | 6.83           | 4.97           | 0.59           | 0.00           |
| Withdrew After Acceptance             | 8.00           | 5.66           | 5.52           | 6.55           | 4.85           |
| <b>Vanderbilt University</b>          |                |                |                |                |                |
| No. Enrolled                          | 54             | 53             | 53             | 58             | 59             |
| No. Not Accepted                      | 1,009          | 992            | 997            | 969            | 1,192          |
| No. Withdrew Before Action            | 50             | 52             | 45             | 77             | 74             |
| No. Withdrew After Acceptance         | 52             | 54             | 50             | 117            | 85             |
| Total Applications                    | 1,165          | 1,151          | 1,145          | 1,221          | 1,410          |
| Per Cent From Out-of-State:           |                |                |                |                |                |
| Enrolled                              | 66.66%         | 64.15%         | 64.15%         | 86.20%         | 77.96%         |
| Not Accepted                          | 95.24          | 96.06          | 94.78          | 95.76          | 94.12          |
| Withdrew Before Action                | 96.00          | 96.15          | 97.77          | 92.20          | 97.29          |
| Withdrew After Acceptance             | 90.38          | 88.88          | 92.00          | 88.88          | 91.76          |
| Total Applications                    | 93.73%         | 94.26%         | 93.36%         | 94.43%         | 93.47%         |
| Action Taken As % Total Applications: |                |                |                |                |                |
| Enrolled                              | 4.63%          | 4.60%          | 4.62%          | 4.75%          | 4.18%          |
| Not Accepted                          | 86.60          | 86.18          | 87.07          | 79.36          | 84.53          |
| Withdrew Before Action                | 4.29           | 4.51           | 3.93           | 6.30           | 5.24           |
| Withdrew After Acceptance             | 4.46           | 4.69           | 4.36           | 9.58           | 6.02           |

APPLICATIONS TO TENNESSEE MEDICAL SCHOOLS BY  
TYPE OF ADMISSION ACTION, 1964-65  
THROUGH 1968-69 (continued)

| <i>Admission Action</i>               | <i>1964-65</i> | <i>1965-66</i> | <i>1966-67</i> | <i>1967-68</i> | <i>1968-69</i> |
|---------------------------------------|----------------|----------------|----------------|----------------|----------------|
| <b>Meharry Medical College</b>        |                |                |                |                |                |
| No. Enrolled                          | 62             | 53             | 72             | 71             | 72             |
| No. Not Accepted                      | 452            | 637            | 566            | 574            | 643            |
| No. Withdrew Before Action            | 19             | 35             | 23             | 31             | 22             |
| No. Withdrew After Acceptance         | 45             | 61             | 82             | 73             | 87             |
| Total Applications                    | 578            | 786            | 743            | 749            | 824            |
| Per Cent From Out-of-State:           |                |                |                |                |                |
| Enrolled                              | 91.93%         | 94.33%         | 95.83%         | 94.36%         | 94.44%         |
| Not Accepted                          | 97.34          | 97.64          | 98.58          | 97.90          | 96.88          |
| Withdrew Before Action                | 100.00         | 97.14          | 100.00         | 100.00         | 100.00         |
| Withdrew After Acceptance             | 97.78          | 96.72          | 96.34          | 98.63          | 97.70          |
| Total Applications                    | 96.88%         | 97.32%         | 98.11%         | 97.73%         | 96.84%         |
| Action Taken As % Total Applications: |                |                |                |                |                |
| Enrolled                              | 10.72%         | 6.74%          | 9.69%          | 9.47%          | 8.73%          |
| Not Accepted                          | 78.20          | 81.04          | 76.17          | 76.63          | 78.03          |
| Withdrew Before Action                | 3.28           | 4.45           | 3.09           | 4.13           | 2.66           |
| Withdrew After Acceptance             | 7.78           | 7.76           | 11.03          | 9.74           | 10.55          |
| <b>Total Medical Schools</b>          |                |                |                |                |                |
| No. Enrolled                          | 297            | 282            | 311            | 327            | 323            |
| No. Not Accepted                      | 1,719          | 1,978          | 2,025          | 2,124          | 2,584          |
| No. Withdrew Before Action            | 113            | 128            | 104            | 113            | 96             |
| No. Withdrew After Acceptance         | 139            | 149            | 172            | 245            | 220            |
| Total Applications                    | 2,268          | 2,537          | 2,612          | 2,809          | 3,223          |
| Per Cent From Out-of-State:           |                |                |                |                |                |
| Enrolled                              | 45.79%         | 49.64%         | 50.16%         | 51.68%         | 47.67%         |
| Not Accepted                          | 91.56          | 93.32          | 93.62          | 70.15          | 92.26          |
| Withdrew Before Action                | 88.49          | 84.37          | 92.30          | 93.80          | 97.91          |
| Withdrew After Acceptance             | 82.73          | 79.86          | 84.30          | 83.26          | 84.09          |
| Total Applications                    | 84.87%         | 87.22%         | 87.78%         | 88.28%         | 87.40%         |
| Action Taken As % Total Applications: |                |                |                |                |                |
| Enrolled                              | 13.09%         | 11.11%         | 11.90%         | 11.64%         | 10.02%         |
| Not Accepted                          | 75.79          | 77.96          | 77.52          | 75.61          | 80.17          |
| Withdrew Before Action                | 4.98           | 5.04           | 3.98           | 4.02           | 2.97           |
| Withdrew After Acceptance             | 6.12           | 5.87           | 6.58           | 8.72           | 6.82           |

Source: Association of American Medical Colleges, Computer Tape

TABLE 25

## GEOGRAPHICAL SOURCE OF ENTERING MEDICAL STUDENTS IN THE SOUTHEASTERN STATES, 1960-1968

| States        | 1960-61 |        |        | 1961-62 |       |        | 1962-63 |        |        | 1963-64 |       |        | 1964-65 |        |        | 1965-66 |       |        | 1966-67 |      |        | 1967-68 |      |        | 1968-69 |      |        |
|---------------|---------|--------|--------|---------|-------|--------|---------|--------|--------|---------|-------|--------|---------|--------|--------|---------|-------|--------|---------|------|--------|---------|------|--------|---------|------|--------|
|               | Total   | Home   | % From | Total   | Home  | % From | Total   | Home   | % From | Total   | Home  | % From | Total   | Home   | % From | Total   | Home  | % From | Total   | Home | % From | Total   | Home | % From | Total   | Home | % From |
| U.S.          | 8,298   | 8,483  | —      | 8,642   | —     | 8,772  | —       | 8,856  | —      | 8,759   | —     | 8,964  | —       | 9,479  | —      | 5,381   | —     | —      | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| S.E. States   | 1,793   | —      | 1,826  | —       | 1,857 | —      | 1,891   | —      | 1,888  | —       | 1,879 | —      | 1,930   | —      | 2,026  | —       | 2,042 | —      | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Ala.: Public  | 89      | 93.75% | 80     | 90.00%  | 82    | 96.34% | 80      | 96.25% | 80     | 93.75%  | 80    | 88.75% | 81      | 93.82% | 89     | 93.25%  | 91    | 83.51% | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Ark.: Public  | 92      | 100.00 | 102    | 99.01   | 104   | 100.00 | 105     | 100.00 | 105    | 100.00  | 105   | 98.09  | 106     | 97.16  | 113    | 99.11   | 110   | 99.39  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Fla.: Public  | 53      | 86.79  | 54     | 83.33   | 58    | 91.37  | 58      | 89.65  | 51     | 90.16   | 60    | 83.33  | 64      | 95.31  | 66     | 90.90   | 65    | 92.30  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Private       | 82      | 91.68  | 84     | 91.66   | 81    | 91.35  | 81      | 95.06  | 83     | 91.56   | 82    | 91.46  | 86      | 91.86  | 88     | 94.31   | 87    | 94.25  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Ga.: Public   | 104     | 99.03  | 100    | 98.00   | 103   | 99.02  | 100     | 100.00 | 101    | 100.00  | 100   | 100.00 | 103     | 100.00 | 105    | 100.00  | 105   | 100.00 | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Private       | 75      | 56.00  | 77     | 72.72   | 78    | 61.53  | 74      | 58.10  | 75     | 50.66   | 74    | 51.35  | 78      | 46.15  | 79     | 32.91   | 81    | 44.44  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Ky.: Public   | 40      | 85.00  | 61     | 83.60   | 76    | 71.05  | 79      | 75.94  | 78     | 76.92   | 79    | 82.27  | 77      | 83.11  | 83     | 83.13   | 82    | 84.14  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Private       | 95      | 87.36  | 86     | 59.30   | 95    | 56.84  | 97      | 54.63  | 96     | 60.41   | 95    | 60.00  | 97      | 59.79  | 99     | 62.62   | 99    | 71.71  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| La.: Public   | 142     | 99.29  | 140    | 99.28   | 141   | 97.16  | 144     | 95.83  | 142    | 96.47   | 142   | 97.88  | 140     | 97.95  | 145    | 98.62   | 145   | 93.79  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Private       | 133     | 21.05  | 136    | 21.01   | 131   | 22.13  | 141     | 23.40  | 134    | 17.16   | 135   | 9.62   | 134     | 20.14  | 139    | 20.86   | 137   | 17.51  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Miss.: Public | 81      | 95.06  | 80     | 93.75   | 80    | 96.25  | 82      | 95.12  | 82     | 87.80   | 81    | 93.82  | 85      | 97.64  | 86     | 96.51   | 86    | 98.83  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| N.C.: Public  | 69      | 85.95  | 72     | 91.66   | 75    | 92.00  | 72      | 94.44  | 72     | 87.50   | 72    | 81.94  | 71      | 78.87  | 75     | 76.00   | 76    | 77.63  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Private       | 130     | 33.07  | 132    | 36.36   | 134   | 34.32  | 140     | 32.85  | 140    | 40.00   | 140   | 30.71  | 138     | 28.26  | 150    | 22.66   | 148   | 28.37  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| S.C.: Public  | 89      | 100.00 | 81     | 100.00  | 80    | 95.00  | 81      | 100.00 | 82     | 92.68   | 82    | 93.30  | 82      | 87.80  | 82     | 90.24   | 92    | 95.65  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Tenn.: Public | 204     | 71.58  | 195    | 72.79   | 195   | 63.07  | 210     | 77.61  | 199    | 75.37   | 199   | 68.84  | 198     | 72.72  | 204    | 73.03   | 210   | 80.47  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Private       | 125     | 16.00  | 122    | 14.75   | 120   | 19.16  | 122     | 14.75  | 122    | 18.85   | 115   | 19.13  | 137     | 17.51  | 144    | 9.02    | 146   | 15.06  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| Va.: Public   | 152     | 59.75  | 163    | 64.41   | 164   | 64.02  | 165     | 58.78  | 175    | 64.00   | 178   | 64.04  | 191     | 60.20  | 210    | 61.90   | 214   | 57.00  | —       | —    | —      | —       | —    | —      | —       | —    | —      |
| W. V.: Public | 46      | 97.82  | 59     | 86.44   | 60    | 86.66  | 60      | 85.00  | 61     | 85.24   | 60    | 80.00  | 62      | 93.34  | 69     | 71.01   | 68    | 82.35  | —       | —    | —      | —       | —    | —      | —       | —    | —      |

Source: *Journal of the American Medical Association*, Vol. 178, No. 6, November 11, 1961; Vol. 182, No. 7, November 17, 1962; Vol. 186, No. 7, November 16, 1963; Vol. 190, No. 7, November 16, 1964; Vol. 194, No. 7, November 7, 1965; Vol. 198, No. 8, November 21, 1966; Vol. 202, No. 8, November 20, 1967; Vol. 206, No. 9, November 25, 1968; Vol. 210, No. 8, November 24, 1969.

TABLE 26  
GEOGRAPHICAL SOURCE OF ENTERING MEDICAL STUDENTS FROM SOUTHEASTERN STATES, 1968-69

| States              | Residents In Public Schools In Their States |                      | Residents in Private Schools In Their States |                      | Public Schools Residents in Out-of-State |                      | Residents in Out-of-State Private Schools |                      |
|---------------------|---|----------------------|--|----------------------|--|----------------------|---|----------------------|
|                     | No.   | % of Total Residents | No.  | % of Total Residents | No.                                      | % of Total Residents | No.                                       | % of Total Residents |
| United States       | 4,485                                       | 46.29%               | 1,893  | 19.54%               | 795                                      | 8.21%                | 2,516                                     | 25.96%               |
| Southeastern States | 1,134                                       | 61.86                | 277  | 15.11                | 77                                       | 4.20                 | 345                                       | 3.82                 |
| Alabama             | 76  | 66.09                | 0  | 0.00                 | 11                                       | 9.56                 | 28  | 24.35                |
| Arkansas            | 109   | 90.09                | 0  | 0.00                 | 2  | 1.65                 | 10  | 8.26                 |
| Florida             | 60  | 25.11                | 82   | 34.31                | 19                                       | 7.94                 | 78  | 32.64                |
| Georgia             | 105   | 56.15                | 36   | 19.26                | 5  | 2.67                 | 41  | 21.92                |
| Kentucky            | 69  | 40.12                | 71   | 41.28                | 6  | 3.48                 | 26  | 15.12                |
| Louisiana           | 136   | 74.73                | 24   | 13.19                | 4  | 2.19                 | 18  | 9.89                 |
| Mississippi         | 85  | 80.96                | 0  | 0.00                 | 6  | 5.71                 | 14  | 13.33                |
| North Carolina      | 59  | 45.74                | 42   | 32.56                | 4  | 3.10                 | 24  | 18.60                |
| South Carolina      | 88  | 77.88                | 0  | 0.00                 | 2  | 1.76                 | 23  | 20.36                |
| Tennessee           | 169   | 77.53                | 22   | 10.09                | 4  | 1.83                 | 23  | 10.55                |
| Virginia            | 122   | 68.93                | 0  | 0.00                 | 8  | 4.51                 | 47  | 26.56                |
| West Virginia       | 56  | 74.67                | 0  | 0.00                 | 6  | 8.00                 | 13  | 17.33                |

Source: *Journal of the American Medical Association*, November 24, 1969, Vol. 210, No. 8.

TABLE  
ACCEPTANCE OF TENNESSEE RESIDENTS IN ALL MEDICAL SCHOOLS

| Year                            | Accepted Applicants | % Increase Over Prev. Year | Acceptances as % Applicants |               |               | Applicants per Acceptance |               |               |
|---------------------------------|---------------------|----------------------------|-----------------------------|---------------|---------------|---------------------------|---------------|---------------|
|                                 |                     |                            | Tenn. Average               | S. E. Average | U. S. Average | Tenn. Average             | S. E. Average | U. S. Average |
| 1960-61                         | 213                 | —                          | 68.70%                      | 60.99%        | 59.5%         | 1.46                      | 1.64          | 1.68          |
| 1961-62                         | 204                 | (4.22) %                   | 67.54                       | 61.24         | 60.4          | 1.48                      | 1.63          | 1.66          |
| 1962-63                         | 193                 | (5.39)                     | 54.06                       | 56.22         | 56.5          | 1.85                      | 1.79          | 1.77          |
| 1963-64                         | 253                 | 31.08                      | 70.67                       | 55.99         | 51.3          | 1.42                      | 1.79          | 1.95          |
| 1964-65                         | 186                 | (26.48)                    | 55.52                       | 51.21         | 47.2          | 1.80                      | 1.95          | 2.12          |
| 1965-66                         | 184                 | (1.07)                     | 58.78                       | 50.31         | 48.2          | 1.70                      | 1.99          | 2.08          |
| 1966-67                         | 193                 | 4.89                       | 60.12                       | 52.17         | 50.0          | 1.66                      | 1.92          | 2.00          |
| 1967-68                         | 213                 | 10.36                      | 65.13                       | 54.99         | 51.8          | 1.54                      | 1.82          | 1.93          |
| 1968-69                         | 204                 | (4.22)                     | 57.30                       | 51.10         | 47.8          | 1.75                      | 1.96          | 2.09          |
| % Increase 1968-69 over 1960-61 |                     | (4.22) %                   | —                           | —             | —             | —                         | —             | —             |

Source: *Journal of Medical Education*, Vol. 37, No. 11, November, 1962; Vol. 38, No. 9, September, 1963; Vol. 38, No. 12, December, 1963; Vol. 39, No. 10, October, 1964; Vol. 40, No. 11, Pt. 1, November, 1965; Vol. 42, No. 1, January, 1967; Vol. 43, No. 1, January, 1968; Vol. 43, No. 12, December, 1968. Data for 1968-69 supplied by staff of *Journal of Medical Education*.

TABLE 28  
APPLICATIONS OF TENNESSEE RESIDENTS  
TO ALL MEDICAL SCHOOLS, 1960-63

| Year                                  | Total Applicants | % Increase Over Prev. Year | Total Applications | % Increase Over Prev. Year | Applications Per Individual |                      |               |
|---------------------------------------|------------------|----------------------------|--------------------|----------------------------|-----------------------------|----------------------|---------------|
|                                       |                  |                            |                    |                            | Tennessee                   | S. E. States Average | U. S. Average |
| 1960-61                               | 310              | —                          | 482                | —                          | 1.6                         | 2.3                  | 3.8           |
| 1961-62                               | 302              | (2.58) %                   | 494                | 2.48%                      | 1.6                         | 2.2                  | 3.7           |
| 1962-63                               | 357              | 18.21                      | 578                | 17.00                      | 1.6                         | 2.2                  | 3.7           |
| 1963-64                               | 358              | .28                        | 590                | 2.07                       | 1.6                         | 2.3                  | 4.0           |
| 1964-65                               | 335              | (6.42)                     | 660                | 11.86                      | 2.0                         | 2.6                  | 4.4           |
| 1965-66                               | 313              | (6.56)                     | 676                | 2.42                       | 2.2                         | 2.7                  | 4.7           |
| 1966-67                               | 321              | 2.55                       | 698                | 3.25                       | 2.2                         | 3.0                  | 4.8           |
| 1967-68                               | 327              | 1.86                       | 669                | (4.15)                     | 2.0                         | 3.0                  | 5.0           |
| 1968-69                               | 356              | 8.86                       | 800                | 19.58                      | 2.2                         | 3.2                  | 5.3           |
| % of Increase in 1968-69 over 1960-61 |                  | 14.83%                     | —                  | 65.97%                     | —                           | —                    | —             |

Source: *Journal of Medical Education*, Vol. 37, No. 11, November, 1962; Vol. 38, No. 9, September, 1963; Vol. 38, No. 12, December, 1963; Vol. 39, No. 10, October, 1964; Vol. 40, No. 11, Pt. 1, November, 1965; Vol. 42, No. 1, January, 1967; Vol. 43, No. 1, January, 1968; Vol. 43, No. 12, December, 1968. Data for 1968-69 supplied by staff of *Journal of Medical Education*.

TABLE 29  
TENNESSEE APPLICANTS TO TENNESSEE MEDICAL SCHOOLS IN 1968-69 WHO ENROLLED IN TENNESSEE  
MEDICAL SCHOOLS IN 1968-69 OR WERE ACCEPTED FOR 1969-70

| Tennessee Institutions Where Applicants Enrolled in 1968-69 |     |                         |        |                         |        |                         |                |                         |     |                         |             | Total Accepted<br>by Tenn. Schools<br>for 1969-70 |             |                    |  |
|---|-----|-------------------------|--------|-------------------------|--------|-------------------------|----------------|-------------------------|-----|-------------------------|-------------|---|-------------|--------------------|--|
| Total<br>Tennessee<br>Applicants                            | UT  |                         | VU     |                         | MMC    |                         | Total Enrolled |                         |     |                         | No.<br>Enr. | % of<br>Total App.                                | No.<br>Enr. | % of<br>Total App. |  |
|   | No. | % of<br>Enr. Total App. | No.    | % of<br>Enr. Total App. | No.    | % of<br>Enr. Total App. | No.            | % of<br>Enr. Total App. | No. | % of<br>Enr. Total App. |             |   |             |                    |  |
| Applied to UT only  | 212 | 116                     | 54.71% |                         |        |                         |                |                         | 116 | 54.71%                  | 10          | 4.72%   |             |                    |  |
| Applied to VU only  | 17  |                         |        | 4                       | 23.52% |                         |                |                         | 4   | 23.52                   | 3           | 17.65   |             |                    |  |
| Applied to MMC only   | 15  |                         |        |                         |        | 1                       | 6.66%          |                         | 1   | 6.66                    | 0           | 0.00  |             |                    |  |
| Applied to UT and VU  | 69  | 36                      | 52.17  | 9                       | 13.04  |                         |                |                         | 45  | 65.21                   | 2           | 2.90  |             |                    |  |
| Applied to UT and MMC                                       | 5   | 1                       | 20.00  |                         |        |                         |                |                         | 1   | 20.00                   | 0           | 0.00  |             |                    |  |
| Applied to VU and MMC                                       | 4   |                         |        |                         |        | 3                       | 75.00          |                         | 3   | 75.00                   | 0           | 0.00  |             |                    |  |
| Applied to all 3 schools                                    | 2   |                         |        |                         |        |                         |                |                         | 0   | 0.00                    | 0           | 0.00  |             |                    |  |
| TOTAL TENNESSEE   |     |                         |        |                         |        |                         |                |                         |     |                         |             |   |             |                    |  |
| APPLICANTS  | 324 | 153                     | 47.22% | 13                      | 4.01%  | 4                       | 1.23%          |                         | 170 | 52.47%                  | 15          | 4.63%   |             |                    |  |

Source: Association of American Medical Colleges, Computer Tape.



TABLE 30  
TENNESSEE APPLICANTS TO TENNESSEE MEDICAL SCHOOLS IN  
1968-69 WHO WERE ACCEPTED BY OUT-OF-STATE  
MEDICAL SCHOOLS

|                               | Total<br>Tennessee<br>Applicants | No. Accepted<br>by Out-of-State<br>Schools for 1968 | No. Accepted<br>by Out-of-State<br>Schools for 1969 | No. | Total Accepted<br>by Out-of-State<br>Medical Schools<br>% of Total App. |
|-------------------------------|----------------------------------|---|---|-----|---|
| Applied to UT only            | 212                              | 7   | 3   | 10  | 4.72%   |
| Applied to VU only            | 17                               | 2   | 0   | 2   | 11.76   |
| Applied to MMC only           | 15                               | 1   | 0   | 1   | 6.66  |
| Applied to UT and VU          | 69                               | 9   | 0   | 9   | 13.04   |
| Applied to UT and MMC         | 5                                | 0   | 0   | 0   | 0.00  |
| Applied to VU and MMC         | 4                                | 0   | 0   | 0   | 0.00  |
| Applied to All 3 Schools      | 2                                | 0   | 0   | 0   | 0.00  |
| TOTAL TENNESSEE<br>APPLICANTS | 324                              | 19  | 3   | 22  | 6.79%   |

Source: Association of American Medical Colleges, Computer Tape

TABLE 31  
TENNESSEE APPLICANTS TO TENNESSEE MEDICAL SCHOOLS IN 1968-69  
WHO WERE ACCEPTED NEITHER BY A TENNESSEE SCHOOL  
NOR BY AN OUT-OF-STATE MEDICAL SCHOOL

|                               | Total<br>Tennessee<br>Applicants | No. Tenn.<br>Applicants<br>Not Accepted | No. Not Accepted<br>As % of Total<br>Tenn. Applicants |
|-------------------------------|----------------------------------|---|---|
| Applied to UT only            | 212                              | 76                                      | 35.85%  |
| Applied to VU only            | 17                               | 8                                       | 47.06   |
| Applied to MMC only           | 15                               | 13                                      | 86.67   |
| Applied to UT and VU          | 69                               | 13                                      | 18.84   |
| Applied to UT and MMC         | 5                                | 4                                       | 80.00   |
| Applied to VU and MMC         | 4                                | 1                                       | 25.00   |
| Applied to All 3 Schools      | 2                                | 2                                       | 100.00  |
| TOTAL TENNESSEE<br>APPLICANTS | 324                              | 117                                     | 36.11%  |

Source: Association of American Medical Colleges, Computer Tape



**Withdrew After Acceptance:**

[illegible]

Total with MCAT

above 50% 26

Source: Association of American Medical Colleges, Computer Tape

TABLE 33

PROJECTED NUMBER OF TENNESSEANS APPLYING TO MEDICAL SCHOOL AND  
PROJECTED TENNESSEANS ACCEPTED BY MEDICAL SCHOOLS  
BASED UPON TOTAL LIVE BIRTHS 22 YEARS EARLIER<sup>a</sup>

| <i>Year of Birth</i>                        | <i>Total Live births</i> | <i>Year of Med. Sch. Application</i> | <i>Tennesseans Applying to Medical School 22 years later</i> | <i>Tennesseans In Medical Schools 22 years later</i> |
|---|--------------------------|--------------------------------------|--|--|
| <i>Actual Medical School Acceptances</i>    |                          |                                      |  |  |
| 1940  | 55,815                   | 1962-63                              | 357  | 193  |
| 1941  | 59,855                   | 1963-64                              | 358  | 253  |
| 1942  | 65,147                   | 1964-65                              | 335  | 186  |
| 1943  | 70,203                   | 1965-66                              | 313  | 184  |
| 1944  | 68,272                   | 1966-67                              | 321  | 193  |
| 1945  | 64,966                   | 1967-68                              | 327  | 213  |
| 1946  | 77,336                   | 1968-69                              | 356  | 204  |
| <i>Projected Medical School Acceptances</i> |                          |                                      |  |  |
| 1947  | 86,619                   | 1969-70                              | 450  | 271  |
| 1948  | 82,127                   | 1970-71                              | 426  | 257  |
| 1949  | 82,854                   | 1971-72                              | 430  | 259  |
| 1950  | 81,376                   | 1972-73                              | 422  | 255  |
| 1951  | 84,312                   | 1973-74                              | 438  | 264  |
| 1952  | 82,280                   | 1974-75                              | 427  | 258  |
| 1953  | 83,170                   | 1975-76                              | 432  | 260  |
| 1954  | 85,834                   | 1976-77                              | 445  | 269  |
| 1955  | 85,037                   | 1977-78                              | 441  | 266  |
| 1956  | 84,958                   | 1978-79                              | 441  | 266  |
| 1957  | 84,076                   | 1979-80                              | 436  | 263  |
| 1958  | 82,760                   | 1980-81                              | 430  | 259  |
| 1959  | 83,152                   | 1981-82                              | 432  | 260  |
| 1960  | 82,036                   | 1982-83                              | 426  | 257  |
| 1961  | 82,248                   | 1983-84                              | 427  | 257  |
| 1962  | 80,974                   | 1984-85                              | 420  | 253  |
| 1963  | 79,932                   | 1985-86                              | 415  | 250  |
| 1964  | 80,286                   | 1986-87                              | 417  | 251  |
| 1965  | 73,050                   | 1987-88                              | 379  | 229  |
| 1966  | 69,078                   | 1988-89                              | 359  | 216  |
| 1967  | 71,559                   | 1989-90                              | 371  | 224  |
| 1968  | 70,000*                  | 1990-91                              | 363  | 219  |

<sup>a</sup> The projected number of Tennesseans applying to medical school is based upon the average of 5.19 persons applying to medical school per 1,000 live births 22 years earlier. The projected number of Tennesseans accepted by medical schools is based upon the average of 3.13 persons accepted to medical school per 1,000 live births 22 years earlier.

\* Preliminary Estimate

TABLE 34

PROJECTED NUMBER OF TENNESSEE APPLICANTS TO ALL MEDICAL SCHOOLS  
AND ADMITTED TO TENNESSEE SCHOOLS BASED ON BACHELOR'S DEGREES  
AWARDED IN TENNESSEE AND THE UNITED STATES

| <i>Year</i>      | <i>U.S.<br/>Bachelor's<br/>Degrees<sup>a</sup></i> | <i>Tennessee<br/>Bachelor's<br/>Degrees<sup>a</sup></i> | <i>Total<br/>Tennessee<br/>Applicants<sup>b</sup></i> | <i>Tennesseans<br/>in<br/>Tenn. Schools<sup>c</sup></i> |
|------------------|--|---|---|---|
| <i>Actual</i>    |  |   |   |   |
| 1963-64          | 460,467  | 8,897   | 358   | 181   |
| 1964-65          | 492,984  | 9,616   | 335   | 173   |
| 1965-66          | 524,117  | 10,159  | 313   | 159   |
| 1966-67          | 562,369  | 10,948  | 321   | 168   |
| 1967-68          | 636,863  | 12,218  | 327   | 162   |
| <i>Projected</i> |  |   |   |   |
| 1970             | 703,120  | 13,570  | 440   | 224   |
| 1975             | 950,904  | 18,352  | 595   | 303   |
| 1980             | 1,111,832  | 21,458  | 695   | 354   |
| 1985             | 1,205,080  | 23,258  | 754   | 384   |
| 1990             | 1,118,036  | 21,578  | 705   | 359   |
| 1995             | 1,255,558  | 24,232  | 785   | 400   |
| 2000             | 1,500,710  | 28,964  | 938   | 478   |

<sup>a</sup> Does Not include first professional degrees.

Source: With a slight adjustment, the U.S. projections were made by Dr. Gus Haggstrom of the Carnegie Commission, Berkeley, California. The Tennessee Projections were based upon 1.93% of the total bachelor's degrees in the U.S.—the average of the period 1963-64 to 1967-68.

<sup>b</sup> The projected number of Tennessee applicants is based upon 3.24% of the projected Tennessee bachelor's degrees awarded; the average percentage over the five year period is the actual number of Tennessee applicants as a percentage of the actual number of bachelor's degrees awarded.

<sup>c</sup> The projected number of Tennesseans who enroll in Tennessee schools represents 50.97% of the projected number of Tennesseans applying to medical school—the average percentage for the five year period of 1963-64 to 1967-68.

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TABLE 36  
GAIN OR LOSS IN LICENTIATES OF 1968 AS COMPARED WITH  
THE ENTERING CLASS OF 1963

| <i>States</i>        | <i>Entering<br/>Class,<br/>1963</i> | <i>Licentiates,<br/>1968</i> | <i>Gain or<br/>Loss in<br/>Licentiates</i> | <i>Rank of Gain<br/>and Loss in<br/>Licentiates</i> |
|----------------------|-------------------------------------|------------------------------|--|---|
| United States        | 8,595                               | 7,636                        | - 959                                      | —   |
| Southeastern States  | 1,679                               | 1,601                        | - 78                                       | —   |
| Alabama              | 113                                 | 69                           | - 44                                       | 37  |
| Alaska               | 0                                   | 8                            | + 8  | 15  |
| Arizona              | 33                                  | 18                           | - 15                                       | 24  |
| Arkansas             | 121                                 | 81                           | - 40                                       | 35  |
| California           | 571                                 | 949                          | + 378                                      | 1   |
| Colorado             | 90                                  | 54                           | - 36                                       | 33  |
| Connecticut          | 114                                 | 114                          | 0  | 18  |
| Delaware             | 17                                  | 3                            | - 14                                       | 23  |
| District of Columbia | 52                                  | 71                           | + 19                                       | 14  |
| Florida              | 199                                 | 108                          | - 91                                       | 42  |
| Georgia              | 179                                 | 212                          | + 33                                       | 10  |
| Hawaii               | 26                                  | 21                           | - 5  | 20  |
| Idaho                | 20                                  | 1                            | - 19                                       | 26  |
| Illinois             | 491                                 | 247                          | - 244                                      | 44  |
| Indiana              | 228                                 | 220                          | - 8  | 21  |
| Iowa                 | 132                                 | 106                          | - 26                                       | 29  |
| Kansas               | 108                                 | 92                           | - 16                                       | 25  |
| Kentucky             | 145                                 | 186                          | + 41                                       | 8   |
| Louisiana            | 177                                 | 236                          | + 59                                       | 5   |
| Maine                | 27                                  | 7                            | - 20                                       | 27  |
| Maryland             | 166                                 | 255                          | + 89                                       | 3   |
| Massachusetts        | 235                                 | 258                          | + 23                                       | 12  |
| Michigan             | 367                                 | 292                          | - 75                                       | 40  |
| Minnesota            | 179                                 | 233                          | + 54                                       | 7   |
| Mississippi          | 91                                  | 111                          | + 20                                       | 13  |
| Missouri             | 144                                 | 236                          | + 92                                       | 2   |
| Montana              | 30                                  | 4                            | - 26                                       | 29  |
| Nebraska             | 104                                 | 127                          | + 23                                       | 12  |
| Nevada               | 7                                   | 8                            | + 1  | 17  |
| New Hampshire        | 14                                  | 3                            | - 11                                       | 22  |
| New Jersey           | 355                                 | 53                           | - 302                                      | 45  |
| New Mexico           | 24                                  | 20                           | - 4  | 19  |
| New York             | 1,295                               | 913                          | - 382                                      | 46  |
| North Carolina       | 139                                 | 178                          | + 39                                       | 9   |
| North Dakota         | 32                                  | 6                            | - 26                                       | 29  |
| Ohio                 | 454                                 | 375                          | - 79                                       | 41  |
| Oklahoma             | 123                                 | 84                           | - 39                                       | 34  |
| Oregon               | 76                                  | 50                           | - 26                                       | 29  |

GAIN OR LOSS IN LICENTIATES OF 1968 AS COMPARED WITH  
THE ENTERING CLASS OF 1963 (continued)

| <i>States</i>    | <i>Entering<br/>Class,<br/>1963</i> | <i>Licentiates,<br/>1968</i> | <i>Gain or<br/>Loss in<br/>Licentiates</i> | <i>Rank of Gain<br/>and Loss in<br/>Licentiates</i> |
|------------------|-------------------------------------|------------------------------|--|---|
| Pennsylvania     | 608                                 | 468                          | - 140                                      | 43  |
| Rhode Island     | 36                                  | 14                           | - 22                                       | 28  |
| South Carolina   | 104                                 | 69                           | - 35                                       | 32  |
| South Dakota     | 38                                  | 7                            | - 31                                       | 31  |
| Tennessee        | 205                                 | 131                          | - 74                                       | 39  |
| Texas            | 359                                 | 329                          | - 30                                       | 30  |
| Utah             | 58                                  | 38                           | - 20                                       | 27  |
| Vermont          | 18                                  | 42                           | + 24                                       | 11  |
| Virginia         | 131                                 | 186                          | + 55                                       | 6   |
| Washington       | 106                                 | 112                          | + 6  | 16  |
| West Virginia    | 75                                  | 34                           | - 41                                       | 36  |
| Wisconsin        | 172                                 | 108                          | - 64                                       | 38  |
| Wyoming          | 7                                   | 2                            | - 5  | 20  |
| U.S. Territories | 0                                   | 87                           | + 87                                       | 4   |

Source: *Journal of the American Medical Association*, June 16, 1969, Vol. 208, No. 11.



TABLE 37  
INTERNSHIPS AND RESIDENCIES OFFERED AND  
FILLED IN THE SOUTHEASTERN STATES, 1968-69

| States              | Internships    |               |             | Residencies    |               |             |
|---------------------|----------------|---------------|-------------|----------------|---------------|-------------|
|                     | No.<br>Offered | No.<br>Filled | %<br>Filled | No.<br>Offered | No.<br>Filled | %<br>Filled |
| United States       | 13,950         | 10,371        | 74%         | 41,748         | 34,582        | 83%         |
| Southeastern States | 2,002          | 1,283         | 64          | 5,908          | 4,582         | 78          |
| Alabama             | 140            | 89            | 64          | 360            | 242           | 67          |
| Arkansas            | 60             | 28            | 47          | 170            | 128           | 75          |
| Florida             | 276            | 169           | 61          | 756            | 682           | 74          |
| Georgia             | 272            | 183           | 67          | 659            | 464           | 70          |
| Kentucky            | 119            | 82            | 69          | 375            | 288           | 77          |
| Louisiana           | 115            | 62            | 54          | 810            | 649           | 78          |
| Mississippi         | 57             | 37            | 65          | 188            | 133           | 71          |
| North Carolina      | 236            | 180           | 76          | 748            | 607           | 81          |
| South Carolina      | 78             | 33            | 42          | 214            | 133           | 62          |
| Tennessee           | 271            | 177           | 65          | 706            | 570           | 81          |
| Virginia            | 281            | 216           | 77          | 720            | 552           | 77          |
| West Virginia       | 97             | 27            | 28          | 202            | 134           | 66          |

Source: "Directory of Approved Interns and Residencies," *Journal of the American Medical Association*, Vol. 210, No. 8, November 24, 1969.

TABLE 38  
AVERAGE BEGINNING SALARIES OF INTERNS AND RESIDENTS, 1969

| Hospitals                         | Avg. Beginning<br>Salary of Interns | Avg. Beginning<br>Salary of<br>Residents |
|-----------------------------------|-------------------------------------|--|
| Baroness Erlanger, Chattanooga    | \$ 7,200 FP*                        | \$ 8,040                                 |
| U.T. Memorial Hospital, Knoxville | 5,472 F                             | 5,900                                    |
| City of Memphis                   | 4,620 FP                            | 5,551                                    |
| Baptist, Memphis                  | 5,700 FP                            | 6,300                                    |
| Vanderbilt Affiliated, Nashville  | 6,000 P                             | 6,507                                    |
| Methodist, Memphis                | 5,400 FP                            | 5,588                                    |
| St. Joseph, Memphis               | 4,800 FP                            | 5,775                                    |
| Baptist, Nashville                | 7,200 O                             | 7,425                                    |
| Hubbard, Nashville                | 6,000 F                             | 6,263                                    |
| St. Thomas, Nashville             | 7,200 O                             | 7,500                                    |
| Veterans Admin., Memphis          | —                                   | 7,414                                    |
| West Tenn. Chest Disease, Memphis | —                                   | 6,240                                    |
| Oak Ridge                         | —                                   | 9,000                                    |
| Tenn. Psychiatric Hsp., Memphis   | —                                   | 5,016                                    |

\* F=Full Maintenance  
P=Partial Maintenance  
O=Without Maintenance

Source: "Directory of Approved Interns and Residencies," *Journal of the American Medical Association*, Vol. 210, No. 8, November 24, 1969.

TABLE 39

RETENTION OF IN-STATE MEDICAL GRADUATES FOR INTERNSHIP AND  
RESIDENCY POSITIONS IN THE SOUTHEASTERN STATES, 1968

| States              | Internships                               |   |        | Residencies   |   |        |
|---------------------|---|---|--------|---|---|--------|
|                     | Number of Graduates<br>Interning Anywhere | Number of Graduates<br>Interning In-State | %      | Number of Graduates<br>Taking Residency<br>Anywhere | Number of Graduates<br>Taking Residency<br>In-State | %      |
| United States       | 8,046                                     | 3,213                                     | 39.93% | 23,866  | 9,422   | 39.47% |
| Southeastern States | 1,611                                     | 580                                       | 36.00  | 4,818   | 1,793   | 37.21  |
| Alabama             | 72  | 48  | 66.66  | 198   | 106   | 53.53  |
| Arkansas            | 86  | 20  | 23.25  | 215   | 71  | 33.02  |
| Florida             | 134                                       | 48  | 35.82  | 349   | 127   | 36.38  |
| Georgia             | 159                                       | 66  | 41.50  | 489   | 223   | 45.60  |
| Kentucky            | 153                                       | 40  | 26.14  | 304   | 89  | 29.27  |
| Louisiana           | 242                                       | 109                                       | 45.04  | 755   | 311   | 41.19  |
| Mississippi         | 65  | 21  | 32.30  | 181   | 79  | 43.64  |
| North Carolina      | 207                                       | 42  | 20.28  | 651   | 235   | 36.09  |
| South Carolina      | 66  | 35  | 53.03  | 241   | 97  | 40.24  |
| Tennessee           | 220                                       | 90  | 40.90  | 863   | 275   | 31.86  |
| Virginia            | 148                                       | 48  | 32.43  | 454   | 147   | 32.37  |
| West Virginia       | 59  | 13  | 22.03  | 118   | 33  | 27.96  |

Source: *Journal of the American Medical Association*, November 24, 1969, Vol. 210, No. 8.